116/2825 FIGURE 103

 ${\tt MSVPGPYQAATGPSSAPSAPPSYEETVAVNSYYPTPPAPMPGPTTGLVTGPDGKGMNPPSYYTQPAPIPNNNPIT} \\ {\tt VQTVYVQHPITFLDRPIQMCCPSCNKMIVSQLSYNAGALTWLSCGSLCLLGCIAGCCFIPFCVDALQDVDHYCPNCRALLGTYKRL} \\$

FIGURE 104

GTTTCTCTCCCTGCCCCGCGACTTCGCGCAAGATCCGGGAAGGACACCCGAGGCCCCTGGGAGACCCTGGGGAG GAGCGCAGGGGTCCTCTTACTGCTGATGGCACCCAGCTCTGGGCCCAGACGCCGCTCACCGTCCACCGCCGGTGC TGGGTAAAATGTCGGTTCCAGGACCTTACCAGGCGGCCACTGGGCCTTCCTCAGCACCATCCGCACCTCCATCCT ATGAAGAGACAGTGGCTGTTAACAGTTATTACCCCACACCTCCAGCTCCCATGCCTGGGCCAACTACGGGGCTTG CAATTACCGTGCAGACGGTCTACGTGCAGCACCCCATCACCTTTTTGGACCGCCCTATCCAAATGTGTTGTCCTT $\verb|CCTGCAACAAGATGATCGTGAGTCAGCTGTCCTATAACGCCGGTGCTCTGACCTGGCTGTCCTGCGGGAGCCTGT|\\$ GCCTGCTGGGGGTGCATAGCGGGCTGCTTCATCCCCTTCTGCGTGGATGCCCTGCAGGACGTGGACCATTAC AGGGGGCCCACCTTCATGTCTTCTTTTGGGGGGAATACGTCGCAAAACTAACAAATCTCCAAACCCCAGAAATTG CTGCTTGGAGTCGTGCATAGGACTTGCAAAGACATTCCCCTTGAGTGTCAGTTCCACGGTTTCCTGCCTCCTGA GACCCTGAGTCCTGCCATCTAACTGTGATCATTGCCCTATCCGAATATCTTCCTGTGATCTGCCATCAGTGGCTC TTTTTCCTGCTTCCATGGGCCTTTCTGGTGGCAGTCTCAAACTGAGAAGCCACAGTTGCCTTATTTTTGAGGCT GTTCTGCCCAGAGCTCGGCTGAACCAGCCTTTAGTGCCTACCATTATCTTATCCGTCTCTTCCCGTCCCTGATGA CAAAGATCTTGCCTTACAGACTTTACAGGCTTGGCTTTGAGATTCTGTAACTGCAGACTTCATTAGCACACAGAT TCACTTTAATTTCTTAATTTTTTTTTAAATACAAGGAGGGGGCTATTAACACCCCAGTACAGACATATCCACAAG GTCGTAAATGCATGCTAGAAAAATAGGGCTGGATCTTATCACTGCCCTGTCTCCCCTTGTTTCTCTGTGCCAGAT $\tt CTTCAGTGCCCCTTTCCATACAGGGATTTTTTTCTCATAGAGTAATTATATGAACAGTTTTTATGACCTCCTTTT$ CTGGTGTCGAACTCCTGGGCTCAAGCGATCCTTCTGCCTTGGCCTCCGAAGTGCTGGGATTGCAGGCATAAGCT ACCATGCTGGGCCTGAACATAATTTCAAGAGGAGGATTTATAAAACCATTTTCTGTAATCAAATGATTGGTGTCA

118/2825 FIGURE 105

 ${\tt MSVPGPYQAATGPSSAPSAPPSYEETVAVNSYYPTPPAPMPGPTTGLVTGPDGKGMNPPSYYTQPAPIPNNNPIT} \\ {\tt VQTVYVQHPITFLDRPIQMCCPSCNKMIVSQLSYNAGALTWLSCGSLCLLGVHSGLLLHPLLRGCPAGRGPLLSQLQSSPGHLQAFVGLSQTWREPGAAGSPFHLSSSFTPGGGSALVVSPLQGAHLHVFFWGEYVAKLTNLQTPEIAAWSRA} \\ {\tt SRA}$

FIGURE 106

GGTCCACCATGCCCTGCTGCACTCCGGCCGCGTCCTCCCCGGGATCGCCGCCGCCTTCCACCCGGGCCTCGCCG CCGCGGCCTCTGCCAGAGCCAGCTCCTGGTGGACCCATGTGGAAATGGGACCTCCAGATCCCATTCTGGGAGTCA CTGAAGCCTTTAAGAGGGACACCAATAGCAAAAAGATGAATCTGGGAGTTGGTGCCTACCGGGATGATAATGGAA AGCCTTACGTTCTGCCTAGCGTCCGCAAGGCAGAGGCCCAGATTGCCGCAAAAAATTTGGACAAGGAATACCTGC CCATTGGGGGACTGGCTGAATTTTGCAAGGCATCTGCAGAACTAGCCCTGGGTGAGAACAGCGAAGTCTTGAAGA GTGGCCGGTTTGTCACTGTGCAGACCATTTCTGGAACTGGAGCCTTAAGGATCGGAGCCAGTTTTCTGCAAAGAT GCATGCAGCTACAAGGTTATCGGTATTATGACCCCAAGACTTGCGGTTTTGACTTCACAGGCGCTGTGGAGGATA TTTCAAAAATACCAGAGCAGAGTGTTCTTCTTCTGCATGCCTGCGCCCACAATCCCACGGGAGTGGACCCGCGTC CGGAACAGTGGAAGGAAATAGCAACAGTGGTGAAGAAAAGGAATCTCTTTGCGTTCTTTGACATGGCCTACCAAG GCTTTGCCAGTGGTGATGGTGATAAGGATGCCTGGGCTGTGCGCCACTTCATCGAACAGGGCATTAATGTTTGCC TCTGCCAATCATATGCCAAGAACATGGGCTTATATGGTGAGCGTGTAGGAGCCTTCACTATGGTCTGCAAAGATG GGGCCCGGATTGCTGCCATTCTGAACACCCCAGATTTGCGAAAACAATGGCTGCAAGAAGTGAAAGGCATGG ACATCACCGACCAAATTGGCATGTTCTGTTTCACAGGGCTAAAGCCTGAACAGGTGGAGCGGCTGATCAAGGAGT $\verb|TCTCCATCTACATGACAAAAGATGGCCGCATCTCTGTGGCAGGGGTCACCTCCAGCAACGTGGGCTACCTTGCCC|$ ATGCCATTCACCAGGTCACCAAGTAATGTCCCTGGGTCGAGGAAACAGAGACAACCTTTCTGTCTTCAGCCTCTG TGGAATATTAAACCAAACTCTCCCCGGTCCTTTTTTCTCCAACTTTTCTCAAAGAGTTTACATGTGCAAGAAAGT CATCGCACCAAAAAACCTGTCAATTATGCCATTGCAATATTTCAGAAGCTTTAACTGAAGTGTCAGGTTCCTCGT GAGAAACAAGCACACCTTAGAGGCTTTGAGAGAAGGCCAGCTAGTTCTGTCATGAGTAGTCGGCCTCGTGTCTGT $\verb|CCTCCCATCTTGGAACAACCTTATCAACAGGCCGCACTGCAGAAATGATGTTTTATGAAAACCATGAGCTGCTGC|\\$ CACTCCAGCAAGGGAAATAATGCAGTTTCCTGTCTTATTTAAGAAAAAGAGAAGGCTCTCTTTTCTCCCTTGTCA TCAACTCCATCCTATCGAGATTATTTAAGAATGAAGAACATAATTTTTCTGCTGATGCCGTACCCTCACCCTTTT CAGCAAAGAATAGTGGAGAGTAGGAAACTGTACTTTATCTCGGCATCCTCTTGAATGATAGTGCAAGTTTCTCCA GTTGGGATGTTGTCTCTCCCGGTTGGACCTCCTCCTTTGTTGAATGTGGTGTGCAGCCTCTCATCTCACACTG TGAGTCCAGCGCCCCAGGGTGCTACCAGGAAAGAGGATATTCTAGGCTTGCGTGCTAGCTGGGTTCAGGCTT CACCCACTGGAAAGAACCACCATCTGCTCTAACCATGTAGACTTATTGCGGCCTGGTTTTCTCTGTTACAATAAA ATTACTGTAGACCC

120/2825 FIGURE 107

MALLHSGRVLPGIAAAFHPGLAAAASARASSWWTHVEMGPPDPILGVTEAFKRDTNSKKMNLGVGAYRDDNGKPY VLPSVRKAEAQIAAKNLDKEYLPIGGLAEFCKASAELALGENSEVLKSGRFVTVQTISGTGALRIGASFLQRFFK FSRDVFLPKPTWGNHTPIFRDAGMQLQGYRYYDPKTCGFDFTGAVEDISKIPEQSVLLLHACAHNPTGVDPRPEQ WKEIATVVKKRNLFAFFDMAYQGFASGDGDKDAWAVRHFIEQGINVCLCQSYAKNMGLYGERVGAFTMVCKDADE AKRVESQLKILIRPMYSNPPLNGARIAAAILNTPDLRKQWLQEVKGMADRIIGMRTQLVSNLKKEGSTHNWQHIT DQIGMFCFTGLKPEQVERLIKEFSIYMTKDGRISVAGVTSSNVGYLAHAIHQVTK

121/2825 FIGURE 108

GTGGGTGAGCGGCCGCCACCGCATCCTGTGCTGTGGGGGCTACGAGGAAAGATCTAATTATCATGACCTGCGAC AGTTTCTTATGTGCCTGTCCCTGTGCACAGCCTTTGCCTTGAGCAAACCCACAGAAAAGAAGACCGTGTACATC ATGAGCCTCAGCTCAGTGACAAGGTTCACAATGATGCTCAGAGTTTTGATTATGACCATGATGCCTTCTTGGGTG TAGATGGCGACAAGGACGGGTTTGTCACTGTGGATGAGCTCAAAGACTGGATTAAATTTGCACAAAAGCGCTGGA TTTACGAGGATGTAGAGCGACAGTGGAAGGGGCATGACCTCAATGAGGACGGCCTCGTTTCCTGGGAGGAGTATA AAAATGCCACCTACGGCTACGTTTTAGATGATCCAGATCCTGATGATGGATTTAACTATAAACAGATGATGGTTA GAGATGAGCGGAGGTTTAAAATGGCAGACAAGGATGGAGACCTCATTGCCACCAAGGAGGAGTTCACAGCTTTCC TGCACCCTGAGGAGTATGACTACATGAAAGATATAGTAGTACAGGAAACAATGGAAGATATAGATAAGAATGCTG ATGGTTTCATTGATCTAGAAGAGTATATTGGTGACATGTACAGCCATGATGGGAATACTGATGAGCCAGAATGGG TAAAGACAGAGCGAGAGCAGTTTGTTGAGTTTCGGGATAAGAACCGTGATGGGAAGATGGACAAGGAAGACCA AAGACTGGATCCTTCCCTCAGACTATGATCATGCAGAGGCAGAAGCCAGGCACCTGGTCTATGAATCAGACCAAA ACAAGGATGGCAAGCTTACCAAGGAGGAGATCGTTGACAAGTATGACTTATTTGTTGGCAGCCAGGCCACAGATT TTACAGCTTCTGGTTTCACATGAAATTGTTTGCGCTACTGAGACTGTTACTACAAACTTTTTAAGACATGAAAAG AACTCTAATTAGTACACTTGTGTTTGTAGATTTACACTTTGTATTATGTATTAACATGGCGTGTTTATTTTTGTA TTTTTCTCTGGTTGGGAGTATGATATGAAGGATCAAGATCCTCCACTCACACATGTAGACAAACATTAGCTCTTT ACTCTTTCTCAACCCCTTATATGATTTTAATAATTCTCACCTTCACTAATTTTTGTAAGCCTGAGATCAATAAGAAA GTCAAAAAGTCCAACATTTCATAGGTAGTAGGGGCCACATATTACATTCAGTTGCTATAGGTCCAGCAACTGAAC $\tt CTGCCATTACCTGGGCAAGGAAGATCCCTTTGCTCTAGGAAAGCTTGGCCCAAATTGATTTTCTTCTTTTTTCCC$ $\verb|CCTGTAGGACTGATGTTGGCTAATTTTGTCAAGCACAGCTGTGGTGGGAAGAGTTAGGGCCAGTGTCTTGAAAAA||$ ATGTTTTCGGGGCATACATTTTTTTTCTGGGTGTGCATCTGTTGAAATGCTCAAGACTTAATTATTTGCCTTTTG AAATCACTGTAAATGCCCCCATCCGGTTCCTCTTCTTCCCAGGTGTGCCAAGGAATTAATCTTGGTTTCACTACA TCTTAAGAAACCCTGAGATTAAAAAAAGACTATTTGGATAACTTATAGGAAAGCCTAGAACCTCCCAGTAGAGTG GGGATTTTTTCTTCTTCTCTTTTTGGACAATAGTTAAATTAGCAGTATTAGTTATGAGTTTGGTTGCAG TGTTCTTATCTTGTGGGCTGATTTCCAAAAACCACATGCTGCTGAATTTACCAGGGATCCTCATACCTCACAATG CAGAGAGGGCTCTTTGGTTTGAGGACCATGGCTTACCTTTCCTGCCTTTGACCCATCACACCCCATTTCCTCCTCTTTCCCTCTCCCCGCTGCCAAAAAAAAAAAAAAGGAAACGTTTATCATGAATCAACAGGGTTTCAGTCCTTATCA AAGAGAGATGTGGAAAGAGCTAAAGAAACCACCCTTTGTTCCCAACTCCACTTTACCCATATTTTATGCAACACA AACACTGTCCTTTTGGGTCCCTTTCTTACAGATGGACCTCTTGAGAAGAATTATCGTATTCCACGTTTTTAGCCC TCAGGTTACCAAGATAAATATATGTATATATATAACCTTTATTATTGCTATATCTTTGTGGATAATACATTCAGGTG GTGCTGGGTGATTTATTATAATCTGAACCTAGGTATATCCTTTGGTCTTCCACAGTCATGTTGAGGTGGGCTCCC TGGTATGGTAAAAAGCCAGGTATAATGTAACTTCACCCCAGCCTTTGTACTAAGCTCTTGATAGTGGATATACTC TTTTAAGTTTAGCCCCAATATAGGGTAATGGAAATTTCCTGCCCTCTGGGTTCCCCATTTTTACTATTAAGAAGA $\verb|CCAGTGATAATTTAATAATGCCACCAACTCTGGCTTAGTTAAGTGAGAGTGTGAACTGTGTGGCAAGAGAGCCTC| \\$ ACACCTCACTAGGTGCAGAGAGCCCAGGCCTTATGTTAAAATCATGCACTTGAAAAGCAAACCTTAATCTGCAAA GCCTGAGGCTGGTGAACAGTAGCTACACACCCATATTGTGTGTTCTGTGAATGCTAGCTCTCTTGAATTTGGATA $\tt TTGGTTATTTTTATAGAGTGTAAACCAAGTTTTATATTCTGCAATGCGAACAGGTACCTATCTGTTTCTAAATA$ AAACTGTTTACATTCAAAAA

FIGURE 109

MDLRQFLMCLSLCTAFALSKPTEKKDRVHHEPQLSDKVHNDAQSFDYDHDAFLGAEEAKTFDQLTPEESKERLGK IVSKIDGDKDGFVTVDELKDWIKFAQKRWIYEDVERQWKGHDLNEDGLVSWEEYKNATYGYVLDDPDPDDGFNYK QMMVRDERRFKMADKDGDLIATKEEFTAFLHPEEYDYMKDIVVQETMEDIDKNADGFIDLEEYIGDMYSHDGNTD EPEWVKTEREQFVEFRDKNRDGKMDKEETKDWILPSDYDHAEAEARHLVYESDQNKDGKLTKEEIVDKYDLFVGS QATDFGEALVRHDEF

123/2825 FIGURE 110A

GGCCGGCGGTGGCGGCGGGGGGGGCTGGACTCGGGCTTAGGGCCTGCTGTGGAGGCAGCGGCGGACGCCGAGCTA AGCAGTTTCTCTGGAAACCCCCCTGGTAAGTGTGGAGGAGGCGGGACACTCTGACCCAAGACGAAAGGCCTGTAG GAATGTGGTCTGGAGTGTCCTTGGCCTTGGCTCCACAGGGTGTGCTTTCCTCTGGGGCCGTCAGGGAGCTCAT GTGGCCTTGATTTGTCTTTTGGAAGATTTTAAAAACCAAAAAGCATAAACATTCTGGTCCTTCAGCAAATC TCTGAAGAAATACTTAACGGAAGGACTTCTCCAGTTCACCATTCTGCTGAGTTTGATTGGGGTACGGGTGGACGT GGATACTTACCTGACCTCACAGCTTCCCCCACTCCGGGAGATCATCCTGGGGCCCAGTTCTGCCTATACTCAGAC CCAGTTCCACAACCTGAGGAATACCTTGGATGGCTATGGTATCCACCCCAAGAGCATAGACCTGGACAATTACTT CACTGCCCGGCGCTCCTCAGTCAGGTGAGGGCCCTGGACAGGTTCCAGGTGCCAACCACTGAGGTAAATGCCTG GCTGGTTCACCGAGACCCAGAGGGGTCTGTCTCTGGCAGTCAGCCCAACTCAGGCCTCGCCCTCGAGAGTTCCAG TGGCCTCCAAGATGTGACAGGCCCAGACAACGGGGTGCGAGAAAGCGAAACGGAGCAGGGATTCGGTGAAGATTT GGAGGATTTGGGGGCTGTAGCCCCCCCAGTCAGTGGAGACTTAACCAAAGAGGACATAGATCTGACTTGACATCCT TTGGCGACAGGATATTGATCTGGGGGCTGGGCGTGAGGTTTTTGACTATAGTCACCGCCAGAAGGAGCAGGATGT GGAGAAGGAGCTGCGAGATGGAGGCGAGCAGGACACCTGGGCAGGCGAGGCGCGGAAGCTCTGGCACGGAACCT GCTAGTGGATGGAGAGACTGGGGGAGAGCTTCCCTGCACAGGTGCCTAGTGGGGAGGACCAGACGGCCCTGTCCCT GGAAGAGTGCCTTAGGCTGCTGGAAGCCACCTGCCCCTTTGGGGAGAATGCTGAGTTTCCAGCAGACATTTCCAG CATAACAGAAGCAGTGCCTAGTGAGAGTGAGCCCCCTGCTCTTCAAAACAACCTCTTGTCTCCTCTTCTGACCGG GACAGAGTCACCATTTGATTTGGAACAGCAGTGGCAAGATCTCATGTCCATCATGGAAATGCAGGCCATGGAAGT GAACACATCAGCAAGTGAAATCCTGTACAGTGCCCCTCCTGGAGACCCACTGAGCACCAACTACAGCCTTGCCCC CAACACTCCCATCAATCAGAATGTCAGCCTGCATCAGGCGTCCCTGGGGGGGCTGCAGCCAGGACTTCTTACTCTT CAGCCCCGAGGTGGAAAGCCTGCCTGTGGCCAGTAGCTCCACGCTGCTCCCGTTGGCCCCCAGCAATTCTACCAG CCTCAACTCCACCTTCGGCTCCACCAACCTGACAGGGCTCTTCTTTCCACCCCAGCTCAATGGCACAGCCAATGA CACAGCAGGCCCAGAGCTGCCTGACCCTTTGGGGGGGTCTGTTAGATGAAGCTATGTTGGATGAGATCAGCCTTATGGACCTGGCCATTGAAGAAGGCTTTAACCCTGTGCAGGCCTCCCAGCTGGAGGAGGAATTTGACTCTGACTCAGG $\verb| CCTTTCCTTAGACTCGAGCCATAGCCCTTCTTCCCTAAGCAGCTCTGAAGGCAGTTCTTCCTCTTCTTCCTCCTC| \\$ TGACTCTGAGACCCTGGATCTGGAAGAGGCCGAGGGTGCTGTGGGCTACCAGCCTGAGTATTCCAAGTTCTGCCG CATGGCACCCAGTGCCCTGGACTCAGCCGACCTGCCACCAGTGCCCTCAAGAAAGGCAGCAAGGAAAGCA GGCTGACTTCCTGGACAAGCAGATGAGCCGGGATGAGCACCGAGCCCATGAAGATCCCTTTCACCAATGA CCTCATCCGAGACATCCGGCGCCGGGGCAAGAACAAGATGGCGGCGCAGAACTGCCGCAAGCGCAAGCTGGACAC CATCCTGAATCTGGAGCGTGATGTGGAGGACCTGCAGCGTGACAAAGCCCGGCTGCTGCGGGAGAAAGTGGAGTT $\verb|CCTGCGCTCCCTGCGACAGATGAAGCAGAAGGTCCAGAGCCTGTACCAGGAGGTGTTTGGGCGGCTGCGAGATGA|\\$ GAACGGACGACCCTACTCGCCCAGTCAGTATGCGCTCCAGTACGCCGGGGACGCCAGTGTCCTCCTCATCCCCCG CACGATGGCCGACCAGCAGGCCCGGCGGCAGGAGAGGAAGCCAAAGGACCGGAGAAAG**TGA**GCCTGGGGAAGAAG GGGGTTTGAAGCCCACCAAGACCGAAACTGGAGAAGGGCTGGACCTGGACCTGGACCTACAGCGGGGAC TTAAATGCCTTCTTATCCAATATATCTTCTCAGATGGGATGACTGCGGGTCAGTGTACAGGAAGAGGCAGCCACT GGCTGGCTCAGCTCCGGGTGGAGTGGAAGTGGCCAGACCATTTAGACGGACAGGGTCCTCACCCTACCCCT TTCCTGTGAGGCAGGGGTGGTGGTGGAGTTGCTGGAGGTAGAGGAGCTATGTGGAGCAAAGGCCGACAGAGGGGA AAGGAACCCCCCCCCCCCGAAAAAAAAATCAAAGCGGGAAGAAAATCAGAGGGAAGGTTAAGGTTGGCTCTG GCCAGGATTCCAGGCAGCAGGTTGGAGTGACTGGTGGGCCTAGATCACTGGTGTGATAAACCCCATTTCACCCCG ACATCCCTGAAGGGGAGCTCTTGGATATCATTGGCCATGTTTCAATCGAATGGAGCCACTGGGCCCCAACACTGG

124/2825 FIGURE 110B

 $\verb|CTTTGAGATTTAGAGTCAAAGGGTAGAGTGAACAGGAAAGGGTCACGTGGTCCCATGTTGCAACAGCCCCAACAT| \\$ TCTCCATCAGAGCCTGCATGTGTATGCCGTCCTCCCCTGGTCCGGTGTTTTGTGTTCCCCACCCCTCACAGACTGC $\tt CTGAGCTCTTCTGTAAGCTGGGGTAGGGTGATGGCAGTGCTCCGGGAACTGGGCCTGCAGCCTTCCTCTTGGG$ GTCACCCTTCCCTCGGGCCTCTGCCTACCAACACTGGGCTTATCACTGGGAAAACACAAAAATTACACAACCC AGCAACAACAACAACTAGTCCTCTTAGAATTTCTTGCGCTTTGATTTTTTTAGGGCTTGTGCCCTGTTTCACT TATAGGGTCTAGAATGCTTGTGTTGAGTAAAAAGGAGATTCCCAATATTCAAAGCTGCTAAATGTTCTCTTTGCC TGCCAAGGTGGCCAGATGGTTCCAGGACTACAATGTCTTTATTTTTAACTGTTTGCCACTGCCGTCACCCCT GCCCGGCTCTGGAGTACCGTCTGCCCCAGACAAGTGGGAGTGAAATGGGGGTGGGGGGAAGCACTGATTCCCAGT TAGGGGGTGCCTAACTGAGCAGTAGGGATAGAAGGTGTGAACCTGGGAGTGCTTTTATAAATTATTTTCCTTGTA AAAATAAAATGGATGATTCAAAAAAAAAA

125/2825 FIGURE 111

FIGURE 112

 $\tt CCGCTCGCCTCTGCTGGCTGCACCCGCCTCCGCGCTCGTCAGGATCCCGCTGCACAAGTTCACGTCCATC$ GCGGTGCCAGCCGTGACCGAGGGGCCCATTCCCGAGGTGCTCAAGAACTACATGGACGCCCAGTACTACGGGGAG ATTGGCATCGGGACGCCCCCCAGTGCTTCACAGTCGTCTTCGACACGGGCTCCTCCAACCTGTGGGTCCCCTCC ATCCACTGCAAACTGCTGGACATCGCTTGCTGGATCCACCACAAGTACAACAGCGACAAGTCCAGCACCTACGTG AAGAATGGTACCTCGTTTGACATCCACTATGGCTCGGGCAGCCTCTCCGGGTACCTGAGCCAGGACACTGTGTCG GTGCCTGCCAGTCAGCGTCGTCAGCCTCTGCCCTGGGCGGTGTCAAAGTGGAGAGGCAGGTCTTTGGGGAGGCC ACCAAGCAGCCAGGCATCACCTTCATCGCAGCCAAGTTCGATGGCATCCTGGGCATGGCCTACCCCCGCATCTCC GTCAACAACGTGCTGCCCGTCTTCGACAACCTGATGCAGCAGAAGCTGGTGGACCAGAACATCTTCTCTTCTAC TCTCTGTCCTGAATGTCACCCGCAAGGCCTACTGGCAGGTCCACCTGGACCAGGTGGAGGTGGCCAGCGGG GTGCGCGAGCTGCAGAAGGCCATCGGGGCCGTGCCGCTGATTCAGGGCGAGTACATGATCCCCTGTGAGAAGGTG GTGTCGCAGGCCGGGAAGACCCTCTGCCTGAGCGGCTTCATGGGCATGGACATCCCGCCACCCAGCGGGCCACTC $\tt TGGATCCTGGGCGACGTCTTCATCGGCCGCTACTACACTGTGTTTGACCGTGACAACAACAGGGTGGGCTTCGCC$ GAGGCTGCCCGCCTCTAGTTCCCAAGGCGTCCGCGCCCAGCACAGAAACAGAGGAGAGTCCCAGAGCAGGAGGC GCTTGGCAGCCGAGCTCGTGTATCCTGGGGCTCCCTTCATCTCCAGGGAGTCCCCTCCCCGGCCCTACCAGCGCC $\tt CCGCTAGAGGCCTGAGGATGAGCTGGAAGGAGTGAGAGGGGACAAAACCCACCTTGTTGGAGCCTGCAGGGTGGT$ GCTGGGACTGAGCCAGTCCCAGGGGCATGTATTGGCCTGGAGGTGGGGTTGGGATTGGGGGCTGGTGCCAGCCTT CCTCTGCAGCTGACCTCTGTTGTCCTCCCCTTGGGCGGCTGAGAGCCCCAGCTGACATGGAAATACAGTTGTTGG

127/2825 FIGURE 113

MQPSSLLPLALCLLAAPASALVRIPLHKFTSIRRTMSEVGGSVEDLIAKGPVSKYSQAVPAVTEGPIPEVLKNYM DAQYYGEIGIGTPPQCFTVVFDTGSSNLWVPSIHCKLLDIACWIHHKYNSDKSSTYVKNGTSFDIHYGSGSLSGY LSQDTVSVPCQSASSASALGGVKVERQVFGEATKQPGITFIAAKFDGILGMAYPRISVNNVLPVFDNLMQQKLVD QNIFSFYLSRDPDAQPGGELMLGGTDSKYYKGSLSYLNVTRKAYWQVHLDQVEVASGLTLCKEGCEAIVDTGTSL MVGPVDEVRELQKAIGAVPLIQGEYMIPCEKVSTLPAITLKLGGKGYKLSPEDYTLKVSQAGKTLCLSGFMGMDI PPPSGPLWILGDVFIGRYYTVFDRDNNRVGFAEAARL

FIGURE 114A

GCGCACTCGGGCACGCGCTCGGAAGTCGGGGGTCGGCGCGGAGTGCAGGCTGCTCCCGGGGTAGGTGAGGGAAGC GCGGAGGCGGGGCGCGGGGCAGTGGTCGGCGAGCAGCGCGGTCCTCGCTAGGGGCGCCCACCCGTCAGTCTCTC CGGCGCGAGCCGCCGCCCCCCCGCGCGGAGTCAGGCCCCTGGGCCCCAGGCTCAAGCAGCGAAGCGGCCTC ${f TG}$ AGAGGGAGCCATCGGGCCGGCCCGGGCCCTGCGGCCCCGGGGGCGCTCTGGCCGTGCTGGCCGG TGCCCGAGTTCGTCAACGCCGCTTTCAACGTGACTGTGGTGGCCCACCAACACGTGTGGGACTCCGCCCGAGGAAT ACTGTGTGCAGACCGGGGTGACCGGGGTCACCAAGTCCTGTCACCTGTGCGACGCCGGGCAGCCCCACCTGCAGC ACGGGGCAGCCTTCCTGACCGACTACAACAACCAGGCCGACACCCTGGTGGCAAAGCCAGACCATGCTGGCCG GGGTGCAGTACCCCAGCTCCATCACCTCACGCTGCACCTGGGAAAAGCTTTTGACATCACCTATGTGCGTCTCA AGTTCCACACCAGCCGCCCGGAGAGCTTTGCCATTTACAAGCGCACACGGGAAGACGGGCCCTGGATTCCTTACC AGTACTACAGTGGTTCCTGCGAGAACACCTACTCCAAGGCAAACCGCGGCTTCATCAGGACAGGAGGGGACGAGC AGCAGGCCTTGTGTACTGATGAATTCAGTGACATTTCTCCCCTCACTGGGGGCCAACGTGGCCTTTTCTACCCTGG AAGGAAGGCCCAGCGCCTATAACTTTGACAATAGCCCTGTGCTGCAGGAATGGGTAACTGCCACTGACATCAGAG TAACTCTTAATCGCCTGAACACTTTTGGAGATGAAGTGTTTAACGATCCCAAAGTTCTCAAGTCCTATTATTATG CCATCTCTGATTTTGCTGTAGGTGGCAGATGTAAATGTAATGGACACGCAAGCGAGTGTATGAAGAACGAATTTG ATAAGCTGGTGTGTAATTGCAAACATAACACATATGGAGTAGACTGTGAAAAGTGTCTTCCTTTCTTCAATGACC GCTACTTCGACCCTGAACTCTATCGTTCCACTGGCCATGGGGGCCACTGTACCAACTGCCAGGATAACACAGATG GCGCCCACTGTGAGAGGTGCCGAGAGAACTTCTTCCGCCTTGGCAACAATGAAGCCTGCTCTTCATGCCACTGTA GTCCTGTGGGCTCTCTAAGCACAGTGTGATAGTTACGGCAGATGCAGCTGTAAGCCAGGAGTGATGGGGGGACA AATGTGACCGTTGCCAGCCTGGATTCCATTCTCTCACTGAAGCAGGATGCAGGCCATGCTCTTGTGATCCCTCTG GCAGCATAGATGAATGTTGAAACAGGAAGATGTTGTTGCAAAGACAATGTCGAAGGCTTCAATTGTGAAA GATGCAAACCTGGATTTTTTAATCTGGAATCATCTAATCCTCGGGGTTGCACACCCTGCTTCTGCTTTGGGCATT $\verb|CTTCTGTCTGTACAAACGCTGTTGGCTACAGTGTTTATTCTATCTCCTCTACCTTTCAGATTGATGAGGATGGGT|\\$ GGCGTGCGGAACAGAGAGATGGCTCTGAAGCATCTCTCGAGTGGTCCTCTGAGAGGCAAGATATCGCCGTGATCT CAGACAGCTACTTTCCTCGGTACTTCATTGCTCCTGCAAAGTTCTTGGGCAAGCAGGTGTTGAGTTATGGTCAGA ACCTCTCCTTCTCCTTTCGAGTGGACAGGCGAGATACTCGCCTCTCTGCCGAAGACCTTGTGCTTGAGGGAGCTG GCTTAAGAGTATCTGTACCCTTGATCGCTCAGGGCAATTCCTATCCAAGTGAGACCACTGTGAAGTATGTCTTCA GGCTCCATGAAGCAACAGATTACCCTTGGAGGCCTGCTCTTACCCCTTTTGAATTTCAGAAGCTCCTAAACAACT TGACCTCTATCAAGATACGTGGGACATACAGTGAGAGAGTGCTGGATATTTGGATGATGTCACCCTGGCAAGTG CTCGTCCTGGGCCTGGAGTCCCTGCAACTTGGGTGGAGTCCTGCACCTGTCCTGTGGGATATGGAGGGCAGTTTT GTGAGATGTGCCTCTCAGGTTACAGAAGAGAAACTCCTAATCTTGGACCATACAGTCCATGTGTGCTTTGCGCCT GCAATGGACACAGCGAGACCTGTGATCCTGAGACAGGTGTTTGTAACTGCAGAGACAATACGGCTGGCCCGCACT GTGAGAAGTGCAGTGATGGGTACTATGGAGATTCAACTGCAGGCACCTCCTCCGATTGCCAACCCTGTCCGTGTC CTGGAGGTTCAAGTTGTGCTGTTGTTCCCAAGACAAAGGAGGTGGTGCACCAACTGTCCTACTGGCACCACTG GTAAGAGATGTGAGCTCTGTGATGATGGCTACTTTGGAGACCCCCTGGGTAGAAACGGCCCTGTGAGACTTTGCC GCCTGTGCCAGTGCAGTGACAACATCGATCCCAACGCAGTTGGAAATTGCAATCGCTTGACGGGAGAATGCCTGA AGTGCATCTATAACACTGCTGGCTTCTATTGTGACCGGTGCAAAGACGGATTTTTTGGAAATCCCCTGGCTCCCA ATCCAGCAGACAAATGCAAAGCCTGCAATTGCAATCCGTATGGGACCATGAAGCAGCAGAGCAGCTGTAACCCCG TGACGGGGCAGTGTGAATGTTTGCCTCACGTGACTGGCCAGGACTGTGGTGCTTGTGACCCTGGATTCTACAATC TGCAGAGTGGGCAAGGCTGTGAGAGGTGTGACTGCCATGCCTTGGGCTCCACCAATGGGCAGTGTGACATCCGCA $\verb|CCGGCCAGTGTGAGTGCCAGCCCGGCATCACTGGTCAGCACTGTGAGCGCTGTGAGGTCAACCACTTTGGGTTTG|$ GACCTGAAGGCTGCAAACCCTGTGACTGTCATCCTGAGGGATCTCTTTCACTTCAGTGCAAAGATGATGGTCGCT GTGAATGCAGAGAGGCTTTGTGGGAAATCGCTGTGACCAGTGTGAAGAAAACTATTTCTACAATCGGTCTTGGC $\verb|CTGGCTGCCAGGAATGTCCAGCTTGTTACCGGCTGGTAAAGGATAAGGTTGCTGATCATAGAGTGAAGCTCCAGG|$ AATTAGAGAGTCTCATAGCAAACCTTGGAACTGGGGATGAGATGACAGATCAAGCCTTCGAGGATAGACTAA AGGAAGCAGAGAGGGAAGTTATGGACCTCCTTCGTGAGGCCCAGGATGTCAAAGATGTTGACCAGAATTTGATGG

129/2825 FIGURE 114B

ATCGCCTACAGAGAGTGAATAACACTCTGTCCAGCCAAATTAGCCGTTTACAGAATATCCGGAATACCATTGAAG TGACTCTTTTGGCAGAAGGCTCGAAAGCTTGCTGAACGTCATAAACAGGAAGCTGATGACATTGTTCGAGTGG CAAAGACAGCCAATGATACGTCAACTGAGGCATACAACCTGCTTCTGAGGACACTGGCAGGAGAAAATCAAACAG CATTTGAGATTGAAGAGCTTAATAGGAAGTATGAACAAGCGAAGAACATCTCACAGGATCTGGAAAAACAAGCTG $\verb|CCCGAGTACATGAGGAGGCCAAAAGGGCCGGTGACAAAGCTGTGGAGATCTATGCCAGCGTGGCTCAGCTGAGCC|\\$ CTTTGGACTCTGAGACACTGGAGAATGAAGCAAATAACATAAAGATGGAAGCTGAGAATCTGGAACAACTGATTG AGAAAGGCAAGACTGAACAGCAGACCGCAGACCAACTCCTAGCCCGAGCTGATGCTGCCAAGGCCCTCGCTGAAG AAGCTGCAAAGAAGGGACGGGATACCTTACAAGAAGCTAATGACATCTCAACAACCTGAAAGATTTTGATAGGC GCGTGAACGATAACAAGACGGCCGCAGAGGAGGCACTAAGGAAGATTCCTGCCATCAACCAGACCATCACTGAAG CCAATGAAAAGACCAGAGAAGCCCAGCAGGCCCTGGGCAGTGCTGCGGCGGATGCCACAGAGGCCAAGAACAAGG CCCATGAGGCGGAGAGGATCGCAAGCGCTGTCCAAAAGAATGCCACCAGCACCAAGGCAGAAGCTGAAAGAACTT TTGCAGAAGTTACAGATCTGGATAATGAGGTGAACAATATGTTGAAGCAACTGCAGGAAGCAGAAAAAGAGCTAA AGAGAAAACAAGATGACGCTGACCAGGACATGATGATGGCAGGGATGGCTTCACAGGCTGCTCAAGAAGCCGAGA TCAATGCCAGAAAAGCCAAAAACTCTGTTACTAGCCTCCTCAGCATTATTAATGACCTCTTGGAGCAGCTGGGGC AGCTGGATACAGTGGACCTGAATAAGCTAAACGAGATTGAAGGCACCCTAAACAAAGCCAAAGATGAAATGAAGG TCAGCGATCTTGATAGGAAAGTGTCTGACCTGGAGAATGAAGCCAAGAAGCAGGAGGCTGCCATCATGGACTATA ACCGAGATATCGAGGAGATCATGAAGGACATTCGCAATCTGGAGGACATCAGGAAGACCTTACCATCTGGCTGCT ${\tt TCAACACCCCGTCCATTGAAAAGCCCTAG}{\tt TGTCTTTAGGGCTGGAAGGCAGCATCCCTCTGACAGGGGGGCAGTT}$ GTGAGGCCACAGAGTGCCTTGACACAAAGATTACATTTTTCAGACCCCCACTCCTCTGCTGCTGTCCATCACTGT CCTTTTGAACCAGGAAAAGTCACAGAGTTTAAAGAGAAGCAAATTAAACATCCTGAATCGGGAACAAAGGGTTTT ATCTAATAAAGTGTCTCTTCCATCACGTTGCTACCTTACCCACACTTCCCTCTGATTTGCGTGAGGACGTGGCAT $\tt CCTACTTACGTACGTGGCATAACACATCGTGTGAGCCCATGTATGCTGGGGTAGAGCAAGTAGCCCTCCCCTGTC$ TCATCGATCCAGCAGAACCTCCTCAGTCTCAGTACTCTTGTTTCTATAAGGAAAAGTTTTGCTACTAACAGTAGC ATTGTGATGGCCAGTATATCCAGTCCATGGATAAAGAAAATGCATCTGCATCTCCTGCCCCTCTTCCTAAGC $\tt CTGAAGATTTTTCTAGTATATTAATAATTGACTAGGAAGATGAACTTTTTTTCAGATCTTTGGGCAGCTGATAAT$ TTAAATCTGGATGGGCAGCTTGCACTCACCAATAGACCAAAAGACATCTTTTGATATTCTTATAAATGGAACTTA CACAGAAGAAATAGGGATATGATAACCACTAAAGTTTTGTTTTCAAAATCAAACTAATTCTTACAGCTTTTTTAT TAGTTAGTCTTGGAACTAGTGTTAAGTATCTGGCAGAGAACAGTTAATCCCTAAGGTCTTGACAAAACAGAAGAA ${\tt AAACAAGCCTCCTCGTCCTAGTCTTTTCTAGCAAAGGGATAAAACTTAGATGGCAGCTTGTACTGTCAGAATCCC}$ GTGTATCCATTTGTTCTTCTGTTGGAGAGATGAGACATTTGACCCTTAGCTCCAGTTTTCTTCTGATGTTTCCAT CTTCCAGAATCCCTCAAAAAACATTGTTTGCCAAATCCTGGTGGCAAATACTTGCACTCAGTATTTCACACAGCT GCCAACGCTATCGAGTTCCTGCACTTTGTGATTTAAATCCACTCTAAACCTTCCCTCTAAGTGTAGAGGGAAGAC $\verb|CCTTACGTGGAGTTTCCTAGTGGGCTTCTCAACTTTTGATCCTCAGCTCTGTGGTTTTAAGACCACAGTGTGACA|\\$ GTTCCCTGCCACACCCCCTTCCTCCTACCAACCCACCTTTGAGATTCATATATAGCCTTTAACACTATGCAAC TTTGTACTTTGCGTAGCAGGGGCTGGGGTGGGGGGAAAGAACCTATTATCATGGACACACTGGTGCTATTAATT ATTTCAAATTTATATTTTTGTGTGAATGTTTTGTGTTTTTGTTTTATCCATGCTATAGAACAAGGAATTTATGTAGA TATACTTAGTCCTATTTCTAGAATGACACTCTGTTCACTTTGCTCAATTTTTCCTCTTCACTGGCACAAGTATCT GAATACCTCCTTCCCCTCCTTCTAGAGTTCTTTGGATTGTACTCCAAAGAATTGTGCCTTGTGTTTGCAGCATCT CCATTCTCTAAATTAATATTGCTTTCCTCCACACCCAGCCACGTAAAGAGGGTAACTTGGGTCCTCTTCCATT GCAGTCCTGATGATCCTAACCTGCAGCACGGTGGTTTTACAATGTTCCAGAGCAGGAACGCCAGGTTGACAAGCT ATGGTAGGATTAGGAAAGTTTGCTGAAGAGGATCTTTGACGCCACAGTGGGACTAGCCAGGAATGAGGGAAAAT GCCCTTTTTGGCAATTGTTGGAGCTGGATAGGTAAGTTTTATAAGGGAGTACATTTTGACTGAGCACTTAGGGCA TCAGGAACAGTGCTACTTACTGGTGGGTAGACTGGGAGAGGTGGTGTAACTTAGTTCTTGATGATCCCACTTCCT

130/2825 FIGURE 114C

FIGURE 115

MRGSHRAAPALRPRGRLWPVLAVLAAAAAAGCAQAAMDECTDEGGRPQRCMPEFVNAAFNVTVVATNTCGTPPEE YCVOTGVTGVTKSCHLCDAGQPHLQHGAAFLTDYNNQADTTWWQSQTMLAGVQYPSSINLTLHLGKAFDITYVRL KFHTSRPESFAIYKRTREDGPWIPYQYYSGSCENTYSKANRGFIRTGGDEQQALCTDEFSDISPLTGGNVAFSTL EGRPSAYNFDNSPVLQEWVTATDIRVTLNRLNTFGDEVFNDPKVLKSYYYAISDFAVGGRCKCNGHASECMKNEF DKLVCNCKHNTYGVDCEKCLPFFNDRPWRRATAESASECLPCDCNGRSQECYFDPELYRSTGHGGHCTNCQDNTD GAHCERCRENFFRLGNNEACSSCHCSPVGSLSTQCDSYGRCSCKPGVMGDKCDRCQPGFHSLTEAGCRPCSCDPS GSIDECNVETGRCVCKDNVEGFNCERCKPGFFNLESSNPRGCTPCFCFGHSSVCTNAVGYSVYSISSTFQIDEDG WRAEQRDGSEASLEWSSERQDIAVISDSYFPRYFIAPAKFLGKQVLSYGQNLSFSFRVDRRDTRLSAEDLVLEGA GLRVSVPLIAQGNSYPSETTVKYVFRLHEATDYPWRPALTPFEFQKLLNNLTSIKIRGTYSERSAGYLDDVTLAS ARPGPGVPATWVESCTCPVGYGGOFCEMCLSGYRRETPNLGPYSPCVLCACNGHSETCDPETGVCNCRDNTAGPH CEKCSDGYYGDSTAGTSSDCQPCPCPGGSSCAVVPKTKEVVCTNCPTGTTGKRCELCDDGYFGDPLGRNGPVRLC RLCQCSDNIDPNAVGNCNRLTGECLKCIYNTAGFYCDRCKDGFFGNPLAPNPADKCKACNCNPYGTMKQQSSCNP VTGQCECLPHVTGQDCGACDPGFYNLQSGQGCERCDCHALGSTNGQCDIRTGQCECQPGITGQHCERCEVNHFGF GPEGCKPCDCHPEGSLSLQCKDDGRCECREGFVGNRCDQCEENYFYNRSWPGCQECPACYRLVKDKVADHRVKLQ ELESLIANLGTGDEMVTDQAFEDRLKEAEREVMDLLREAQDVKDVDQNLMDRLQRVNNTLSSQISRLQNIRNTIE ETGNLAEQARAHVENTERLIEIASRELEKAKVAAANVSVTQPESTGDPNNMTLLAEEARKLAERHKQEADDIVRV AKTANDTSTEAYNLLLRTLAGENQTAFEIEELNRKYEQAKNISQDLEKQAARVHEEAKRAGDKAVEIYASVAQLS PLDSETLENEANNIKMEAENLEQLIDQKLKDYEDLREDMRGKELEVKNLLEKGKTEQQTADQLLARADAAKALAE ${\tt EAAKKGRDTLQEANDILNNLKDFDRRVNDNKTAAEEALRKIPAINQTITEANEKTREAQQALGSAAADATEAKNK}$ AHEAERIASAVQKNATSTKAEAERTFAEVTDLDNEVNNMLKQLQEAEKELKRKQDDADQDMMMAGMASQAAQEAE INARKAKNSVTSLLSIINDLLEQLGQLDTVDLNKLNEIEGTLNKAKDEMKVSDLDRKVSDLENEAKKQEAAIMDY NRDIEEIMKDIRNLEDIRKTLPSGCFNTPSIEKP

FIGURE 116

GCCATCACCGCCAGCCGGGTGGAGTGAGCGGCGCTGGGCTCGGGCTCCGCGGCGGAAGAGGCGGCGG GACCAACAACATCACCCTTGAAGATCTAGAACAGCTCAAGTCGGCCTGCAAGGAAGACATCCCCAGCGAAAAGAG TGAGGAGATCACTACTGGCAGTGCCTGGTTTAGCTTCCTGGAGAGCCACAACAAGCTGGACAAAGACAACCTCTC CTACATTGAGCACATCTTTGAGATCTCCCGCCGTCCTGACCTACTCACTATGGTGGTTGACTACAGAACCCGTGT GCTGAAAATCTCTGAGGAGGATGAGCTGGACACCAAGCTAACCCGTATCCCCAGTGCCAAGAAGTACAAAGACAT ${\tt TATCCGGCAGCCCTCTGAGGAAGAGATCATCAAATTGGCTCCCCCACCGAAGAAGGCC\underline{\textbf{TGA}}\texttt{GCAAGGGGGAGGAA}$ GAGGAGGAAGGTTGGACCTTCATCAGACCACTCCCTTCCCCCATCCTCCAGGAGAGGGGGCAAGGGCAACCCACC TTCCCCACTTTAGGAGGAGGTGGGGGCTATTTCTATGCAAATAGAAATCAGCACATTCCTCCTACTTCCCTTTCC TCCACTCCCCCATATCTTTAAAGTGTGGAAGCAGAAAGGACCTGCATTTTCCTACATTGAGGAGCTGACATAGG GGTAAGGTATGGGAGAGGTAGGTGGATCCAGGGAAAAGCAGTGGGGACGGAAGGCAAAGAGACCACTCAACCCCC ACCTGGAAGGGCCAAAGAAAAGCCAGAGTTCCATGTTTGTACTCCTGTGCTGGACTGTTTCCTGAGTACCAGCAG GTCCCTTTTTGTCTCTCATGGGCCTAGCATAGGTATGAGCCAGGGATCCTTTCCTGGTCCCTAAGATCAAACCCC ATGGAGCAGCCAGCGTTAGATGCCCCCACCCACCTGTACTCTGGAGAGACTGTGCTGGGAACATGTACCACTGAG $\tt CCTGAGATGGGGATGAGGGCAGAGAGGGGGAGCCCCCTCTTCCACTCAGTTGTTCCTACTCAGACTGTTGCACT$ CTAAACCTAGGGAGGTTGAAGAATGAGACCCTTAGGTTTTAACACGAATCCTGACACCACCATCTATAGGGTCCC AAACTGCACTGCCATGTCTGCCCTTTTTTGTGGTGTCTAGCATTAACTTATTGTCTAGGCCAGAGCGGGGGTGGG AAAACATTAAATTCACATGCAGTCTCAGAGACTATTTAGACAAAGTTCAAGTTAGGAGCTTTTAGGATGTGGGAG ATACTTGTAGAATTGGGTGGGGGGAATGAGCATGAACTGTCCTTCCATTTGGGATATGTTACGTTAGAGTGAGAG ${\tt AGAGAATAAGGAGCCTTTCTTATGGAAGAAATGGGAGAAGAGAGACAGGGTTCTTTTCAGCAGAGTCTAGTAGTT}$ AAAAAAAAAA

133/2825 FIGURE 117

MAEYGTLLQDLTNNITLEDLEQLKSACKEDIPSEKSEEITTGSAWFSFLESHNKLDKDNLSYIEHIFEISRRPDL LTMVVDYRTRVLKISEEDELDTKLTRIPSAKKYKDIIRQPSEEEIIKLAPPPKKA

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FIGURE 118

CATCTTTGTCAGTGCACAAA**TC**GCGCCCTACAGCCTACTGGTGACTCGGCTGCAGAAAGCTCTGGGTGTGCGGC AGTACCATGTGGCCTCAGTCCTGTGCCAACGGGCCAAGGTGGCGATGAGCCACTTTGAGCCCAACGAGTACATCC ATTATGACCTGCTAGAGAAGAACATTAACATTGTTCGCAAACGACTGAACCGGCCGCTGACACTCTCGGAGAAGA TTGTGTATGGACACCTGGATGACCCCGCCAGCCAGGAAATTGAGCGAGGCAAGTCGTACCTGCGGCTGCGGCCGG ACCGTGTGGCCATGCAGGATGCGACGGCCCAGATGGCCATGCTCCAGTTCATCAGCAGCGGGCTGTCCAAGGTGG CTGTGCCATCCACCATCCACTGTGACCATCTGATTGAAGCCCAGGTTGGGGGCGAGAAAGACCTGCGCCGGGCCA AGGACATCAACCAGGAAGTTTATAATTTCCTGGCAACTGCAGGTGCCAAATATGGCGTGGGCTTCTGGAAGCCTG GATCTGGAATCATTCACCAGATTATTCTGGAAAACTATGCGTACCCTGGTGTTCTTCTGATTGGCACTGACTCCC ACACCCCAATGGTGGCGGCCTTGGGGGCATCTGCATTGGAGTTGGGGGTGCCGATGCTGTGGATGTCATGGCTG CCAAAGATGTGATCCTGAAGGTGGCAGGCATCCTCACGGTGAAAGGTGGCACAGGTGCAATCGTGGAATACCACG GGCCTGGTGTAGACTCCATCTCCTGCACTGGCATGGCGACAATCTGCAACATGGGTGCAGAAATTGGGGCCACCA CTGATGAATTCAAGGATCACTTGGTGCCTGACCCTGGCTGCCATTATGACCAACTAATTGAAATTAACCTCAGTG AGCTGAAGCCACACATCAATGGGCCCTTCACCCCTGACCTGGCTCACCCTGTGGCAGAAGTGGGCAAGGTGGCAG AGAAGGAAGGATGGCCTCTGGACATCCGAGTGGGTCTAATTGGTAGCTGCACCAATTCAAGCTATGAAGATATGG GGCGCTCAGCAGCTGTGGCCAAGCAGGCACTGGCCCATGGCCTCAAGTGCAAGTCCCAGTTCACCATCACTCCAG GTTCCGAGCAGATCCGCGCCACCATTGAGCGGGACGGCTATGCACAGATCTTGAGGGGATCTGGGTGGCATTGTCC TGGCCAATGCTTGTGGCCCCTGCATTGGCCAGTGGGACAGGACACCAATCAAGAAGGGGGAGAAGAACACAATCG TCACCTCCTACAACAGGAACTTCACGGGCCGCAACGACGCCAAACCCCGAGACCCATGCCTTTGTCACGTCCCCAG AGATTGTCACAGCCCTGGCCATTGCGGGAACCCTCAAGTTCAACCCAGAGACCGACTACCTGACGGGCACGGATG GCAAGAAGTTCAGGCTGGAGGCTCCGGATGCAGATGAGCTTCCCAAAGGGGAGTTTGACCCAGGGCAGGACACCT AGCCTTTTGACAAGTGGGATGGCAAGGACCTGGAGGACCTGCAGATCCTCATCAAGGTCAAAGGGAAGTGTACCA $\tt TTGGTGCCATCAACATTGAAAACGGCAAGGCCAACTCCGTGCGCAATGCCGTCACTCAGGAGTTTGGCCCCGTCC$ CTGACACTGCCCGCTACTACAAGAAACATGGCATCAGGTGGTGGTGATCGGAGACCGAGAACTACGGCGAGGGCT TCCACGAGACCAACCTGAAGAAACAGGGCCTGCTGCCTCTGACCTTCGCTGACCCGGCTGACTACAACAAGATTC ACCCTGTGGACAAGCTGACCATTCAGGGCCTGAAGGACTTCACCCCTGGCAAGCCCCTGAAGTGCATCATCAAGC $\verb|ACCCCAACGGGACCCAGGAGACCATCCTCCTGAACCACCTTCAACGAGACGCAGATTGAGTGGTTCCGCGCTG|$ CTCCACGTGTGCCATCAGTGGATCCGATCCGTCCAGCCATGGCTTCCTATTCCAAGTAGTGTAACCC

FIGURE 119

MAPYSLLVTRLQKALGVRQYHVASVLCQRAKVAMSHFEPNEYIHYDLLEKNINIVRKRLNRPLTLSEKIVYGHLD DPASQEIERGKSYLRLRPDRVAMQDATAQMAMLQFISSGLSKVAVPSTIHCDHLIEAQVGGEKDLRRAKDINQEV YNFLATAGAKYGVGFWKPGSGIIHQIILENYAYPGVLLIGTDSHTPNGGGLGGICIGVGGADAVDVMAGIPWELK CPKVIGVKLTGSLSGWSSPKDVILKVAGILTVKGGTGAIVEYHGPGVDSISCTGMATICNMGAEIGATTSVFPYN HRMKKYLSKTGREDIANLADEFKDHLVPDPGCHYDQLIEINLSELKPHINGPFTPDLAHPVAEVGKVAEKEGWPL DIRVGLIGSCTNSSYEDMGRSAAVAKQALAHGLKCKSQFTITPGSEQIRATIERDGYAQILRDLGGIVLANACGP CIGQWDRKDIKKGEKNTIVTSYNRNFTGRNDANPETHAFVTSPEIVTALAIAGTLKFNPETDYLTGTDGKKFRLE APDADELPKGEFDPGQDTYQHPPKDSSGQHVDVSPTSQRLQLLEPFDKWDGKDLEDLQILIKVKGKCTTDHISAA GPWLKFRGHLDNISNNLLIGAINIENGKANSVRNAVTQEFGPVPDTARYYKKHGIRWVVIGDENYGEGSSREHAA LEPRHLGGRAIITKSFARIHETNLKKQGLLPLTFADPADYNKIHPVDKLTIQGLKDFTPGKPLKCIIKHPNGTQE TILLNHTFNETQIEWFRAGSALNRMKELQQ

136/2825 FIGURE 120

CTCCGAACAGGAAGAGGACGAAAAAAATAACCGTCCGCGACGCCGAGACAAACCGGACCCCCAACCACCATGAAC AGCAAAGGTCAATATCCAACACAGCCAACCTACCCTGTGCAGCCTCCTGGGAATCCAGTATACCCTCAGACCTTG $\tt CCAGGGGCTGCCACAGTCCCCACCATGTCAGCCGCATTTCCTGGAGCCTCTCTGTATCTTCCCATGGCCCAGTCT$ GTGGCTGTTGGGCCTTTAGGTTCCACAATCCCCATGGCTTATTATCCAGTCGGTCCCATCTATCCACCTGGCTCC ACAGTGCTGGTGGAAGGAGGGTATGATGCAGGTGCCAGATTTGGAGCTGGGGCTACTGCTGGCAACATTCCTCCT CCACCTCCTGGATGCCCTCCCAATGCTGCTCAGCTTGCAGTCATGCAGGGAGCCAACGTCCTCGTAACTCAGCGG GGAAAGACATCACATACCTTCAGCACTTCTCACAATGTAACTGCTTTAGTCATATTAACCTGAAGTTGCAGTTTA GACACATGTTGTTGGGGTGTCTTTCTGGTGCCCAAACTTTCAGGCACTTTTCAAATTTAATAAGGAACCATGTAA $\verb|CCTAAGGATTTTCCTTTAATTTCTCTGGAGTAATACTGTACCATACTGGTCTTTGCTTTTAGTAATAAAACATCA|\\$ AATTAGGTTTGGAGGGAACTTTGATCTTCCTAAGAATTAAAGTTGCCAAATTATTCTGATTGGTCTTTAATCTCC TTTAAGTCTTTGATATATATTACTTGTTATAAATGGAACGCATTAGTTGTCTGCCTTTTCCTTTCCATCCCTTGC AAAGCCAGTCAGACTAATTTCCTTCTTCCTCGCACTTCTCCCCCACTCGTCATCTTTTAACTAGTGTTTCACAAG GATCCTCTGAAACCCTCTCTGTGCCCCAAGTACAGATGCCATTACTTCTGCTTTCGTATCTCCTCAGGCAAAAGT GGAGGGTGCCTTATGGGCCCTCCTCATAGGTTGTCTCTGCATACACGAACCTAACCCAAATTTGCTTTGGTGCCA GAAAAACTGAGCTATGTTTGAACAAAGATGTCGTGCAAACTGTACTGTGAACAACAGTTGGTTTAAAATATGAGG GGCAAGGAGGAGGATGCATTTCAAAAGCTTGATTGATGTGTTCAGAGCTAAATTAAGAGGAGTTTTCAGATCAAA AACTGGTTACCATTTTTTGTCAGAGTGTCTGATGCGGCCACTCATTCGGCTCCCCAGAATTCCTAGACTGGGTTA ATAGGGTCATATTGTGAATGTCTCACTACAAAATGACTTGAGTCCAGTGAAATCTCATTAGGGTTTAAGAATATT ${\tt TCAGGGATCCTTAATGTTTTGATTTTTGTTTTCTGAAATTGGATTTTATTTTATCTTATATTTCAGTTC}$ ATCTAAATTGTGTGTTCTGTACATGTGATGTTTGACTGTACCATTGACTGTTATGGAAGTTCAGCGTTGTATGTC TCTCTCTACACTGTGGTGCACTTAACTTGTGGAATTTTTATACTAAAAATGTAGAATAAAGACTATTTTGAAGAT TTGAATAAAGTGATGAAGTTGC

137/2825 FIGURE 121

 ${\tt MNSKGQYPTQPTYPVQPPGNPVYPQTLHLPQAPPYTDAPPAYSELYRPSFVHPGAATVPTMSAAFPGASLYLPMAQSVAVGPLGSTIPMAYYPVGPIYPPGSTVLVEGGYDAGARFGAGATAGNIPPPPPGCPPNAAQLAVMQGANVLVTQRKGNFFMGGSDGGYTIW$

FIGURE 122A

GGCACGAGGAGGAGTCGGGGTCTTCCCCAGTTTTCTCAGCCAGGCGGCGGCGGCGACTGGCAATGTTTGGCCTC AAAAGAAACGCGGTAATCGGACTCAACCTCTACTGTGGGGGGGCCGCCTTGGGGGGCCGGCAGCGGCGCCCACC GCGGTGATTGGCGGAAGCCCCGGCGCAAGCCCCCGTCCACCCTCACGCCAGACTCCCGGAGGGTCGCGCGGCCG CCGCCCATTGGCGCCGAGGTCCCCGACGTCACCGCGACCCCCGCGAGGCTGCTTTTCTTCGCGCCCACCCGCCGC GCGGCGCCTTGAGGAGATGGAAGCCCCGGCCGCTGACGCCATCATGTCGCCCGAAGAGGAGCTGGACGGGTAC GAGCCGGAGCCTCTCGGGAAGCGGCCGGCTGTCCTGCCGCTGCTGGAGTTGGTCGGGGAATCTGGTAATAACACC AGTACGGACGGTCACTACCCTCGACGCCGCCGCCAGCAGAGGAGGAGGAGGAGTTGTACCGGCAGTCGCTG GAGATTATCTCTCGGTACCTTCGGGAGCAGGCCACCGGCGCCAAGGACACAAAGCCAATGGGCAGGTCTGGGGCC ACCAGCAGGAAGGCGCTGGAGACCTTACGACGGGTTGGGGATGGCGTGCAGCGCAACCACGAGACGCCTTCCAA GGCATGCTTCGGAAACTGGACATCAAAAACGAAGACGATGTGAAATCGTTGTCTCGAGTGATGATCCATGTTTTC AGCGACGGCGTAACAACTGGGGCAGGATTGTGACTCTCATTTCTTTTGGTGCCTTTGTGGCTAAACACTTGAAG ACCATAAACCAAGAAGCTGCATCGAACCATTAGCAGAAGTATCACAGACGTTCTCGTAAGGACAAAACGGGAC TGGCTAGTTAAACAAAGAGGCTGGGATGGGTTTGTGGAGTTCTTCCATGTAGAGGACCTAGAAGGTGGCATCAGG AAGTGCAATAGTTGACTTTTAACCAACCACCACCACCACCAAAACCAGTTTATGCAGTTGGACTCCAAGCTGTAA ACTTTGTTTGGGAAGCTATGGAGGAGGACTTTTAGATTTAGTGAAGATGGTAGGGTGGAAAGACTTAATTTCCTT GTTGAGAACAGGAAAGTGGCCAGTAGCCAGGCAAGTCATAGAATTGATTACCCGCCGAATTCATTAATTTACTGT AGTGTTAAGAGAAGCACTAAGAATGCCAGTGACCTGTGTAAAAGTTACAAGTAATAGAACTATGACTGTAAGCCT CAGTACTGTACAAGGGAAGCTTTTCCTCTCTCTAATTAGCTTTCCCAGTATACTTCTTAGAAAGTCCAAGTGTTC AGGACTTTTATACCTGTTATACTTTGGCTTGGTTTCCATGATTCTTACTTTATTAGCCTAGTTTATCACCAATAA TACTTGACGGAAGGCTCAGTAATTAGTTATGAATATGGATATCCTCAATTCTTAAGACAGCTTGTAAATGTATTT TTCATACCCTTTTGAACTTTGCAACTTCCGTAATTAGGAACCTGTTTCTTACAGCTTTTCTATGCTAAACTTTGT TCTGTTCAGTTCTAGAGTGTATACAGAACGAATTGATGTGTAACTGTATGCAGACTGGTTGTAGTGGAACAAATC TGATAACTATGCAGGTTTAAATTTTCTTATCTGATTTTGGTAAGTATTCCTTAGATAGGTTTTTCTTTGAAAACC TGGGATTGAGAGGTTGATGAATGGAAATTCTTTCACTTCATTATATGCAAGTTTTCAATAATTAGGTCTAAGTGG CCTAATTTAACTGGTGAAATTTAAAGTGAATTCATGGGCTCATCTTTAAAGCTTTTACTAAAAGATTTTCAGCTG CCTGTCCTTGAAATTGCTGATTGTTCTGCTCCCTCTACAGATATTTATATCAATTCCTACAGCTTTCCCCT GCCATCCCTGAACTCTTTCTAGCCCTTTTAGATTTTGGCACTGTGAAACCCCTGCTGGAAACCTGAGTGACCCTC CCTCCCCACCAAGAGTCCACAGACCTTTCATCTTTCACGAACTTGATCCTGTTAGCAGGTGGTAATACCATGGGT GCTGTGACACTAACAGTCATTGAGAGGTGGGAGGAAGTCCCTTTTCCTTGGACTGGTATCTTTCAACTATTGTT TTATCCTGTCTTTGGGGGCAATGTGTCAAAAGTCCCCTCAGGAATTTTCAGAGGAAAGAACATTTTATGAGGCTT TCTCTAAAGTTTCCTTTGTATAGGAGTATGCTCACTTAAATTTACAGAAAGAGTGAGCTGTGTTAAACCTCAGA GTTTAAAAGCTACTGATAAACTGAAGAAAGTGTCTATATTGGAACTAGGGTCATTTGAAAGCTTCAGTCTCGGAA CATGACCTTTAGTCTGTGGACTCCATTTAAAAATAGGTATGAATAAGATGACTAAGAATGTAATGGGGAAGAACT GCCCTGCCTGCCCATCTCAGAGCCATAAGGTCATCTTTGCTAGAGCTATTTTTACCTATGTATTTATCGTTCTTG GATCTGGTTACGGTAACTAAAAAAGCCTGTCTGCCAAATCCAGTGGAAACAAGTGCATAGATGTGAATTGGTTTT TAGGGGCCCCACTTCCCAATTCATTAGGTATGACTGTGGAAATACAGACAAGGATCTTAGTTGATATTTTGGGCT TGGGGCAGTGAGGGCTTAGGACACCCCAAGTGGTTTGGGAAAGGAGGAGGGGAGTGGTGGGTTTATAGGGGGAGG

139/2825 FIGURE 122B

140/2825 FIGURE 123

MFGLKRNAVIGLNLYCGGAGLGAGSGGATRPGGRLLATEKEASARREIGGGEAGAVIGGSAGASPPSTLTPDSRR VARPPPIGAEVPDVTATPARLLFFAPTRRAAPLEEMEAPAADAIMSPEEELDGYEPEPLGKRPAVLPLLELVGES GNNTSTDGSLPSTPPPAEEEEDELYRQSLEIISRYLREQATGAKDTKPMGRSGATSRKALETLRRVGDGVQRNHE TAFQGMLRKLDIKNEDDVKSLSRVMIHVFSDGVTNWGRIVTLISFGAFVAKHLKTINQESCIEPLAESITDVLVR TKRDWLVKQRGWDGFVEFFHVEDLEGGIRNVLLAFAGVAGVGAGLAYLIR

141/2825 FIGURE 124

CACGCTTGCCGCCGCCGCAGAA**ATC**CTTCGGTTACCCACAGTCTTTCGCCAGATGAGACCGGTGTCCAGGGTA CTGGCTCCTCATCTCACTCGGGCTTATGCCAAAGATGTAAAATTTGGTGCAGATGCCCGAGCCTTAATGCTTCAA GGTGTAGACCTTTTAGCCGATGCTGTGGCCGTTACAATGGGGCCAAAGGGAAGAACAGTGATTATTGAGCAGGGT TGGGGAAGTCCCAAAGTAACAAAAGATGGTGTGACTGTTGCAAAGTCAATTGACTTAAAAGATAAATACAAGAAC ATTGGAGCTAAACTTGTTCAAGATGTTGCCAATAACACAAATGAAGAAGCTGGGGATGGCACTACCACTGCTACT GTACTGGCACGCTCTATAGCCAAGGAAGGCTTCGAGAAGATTAGCAAAGGTGCTAATCCAGTGGAAATCAGGAGA GGTGTGATGTTAGCTGTTGATGCTGAATTGCTGAACTTAAAAAGCAGTCTAAACCTGTGACCACCCCTGAAGAA ATTGCACAGGTTGCTACGATTTCTGCAAACGGAGACAAAGAAATTGGCAATATCATCTCTGATGCAATGAAAAAA GTTGGAAGAAGGGTGTCATCACAGTAAAGGATGGAAAAACACTGAATGATGAATTAGAAATTATTGAAGGCATG AAGTTTGATCGAGGCTATATTTCTCCATACTTTATTAATACATCAAAAGGTCAGAAATGTGAATTCCAGGATGCC TATGTTCTGTTGAGTGAAAAGAAAATTTCTAGTATCCAGTCCATTGTACCTGCTCTTGAAATTGCCAATGCTCAC CGTAAGCCTTTGGTCATAATCGCTGAAGATGTTGATGGAGAGCTCTAAGTACACTCGTCTTGAATAGGCTAAAG ATTGCTACTGGTGGTGCAGTGTTTGGAGAGAGGGGATTGACCCTGAATCTTGAAGACGTTCAGCCTCATGACTTA GGAAAAGTTGGAGAGGTCATTGTGACCAAAGACGATGCCATGCTCTTAAAAGGAAAAGGTGACAAGGCTCAAATT AAAGACAGAGTTACAGATGCCCTTAATGCTACAAGAGCTGCTGTTGAAGAAGGCATTGTTTTGGGAGGGGGTTGT GCCCTCCTTCGATGCATTCCAGCCTTGGACTCATTGACTCCAGCTAATGAAGATCAAAAAATTGGTATAGAAATT ATTAAAAGAACACTCAAAATTCCAGCAATGACCATTGCTAAGAATGCAGGTGTTGAAGGATCTTTGATAGTTGAG AAAATTATGCAAAGTTCCTCAGAAGTTGGTTATGATGCTATGGCTGGAGATTTTGTGAATATGGTGGAAAAAGGA ATCATTGACCCAACAAAGGTTGTGAGAACTGCTTTATTGGATGCTGCTGTGTGGCCTCTCTGTTAACTACAGCA GAAGTTGTAGTCACAGAAATTCCTAAAGAAGAGAAGGACCCTGGAATGGGTGCAATGGGTGGAATGGGAGGTGGT ATGGGAGGTGGCATGTTCTAACTCCTAGACTAGTGCTTTACCTTTATTAATGAACTGTGACAGGAAGCCCAAGGC CCATCAGTTACTGGTTTCAGTTGACAAAATATATAATGGTTTACTGCTGTCATTGTCCATGCCTACAGATAATTT ATTTTGTATTTTTGAATAAAAACATTTGTACATTCCTGATACTGGGTACAAGAGCCATGTACCAGTGTACTGCT TTCAACTTAAATCACTGAGGCATTTTTACTACTATTCTGTTAAAATCAGGATTTTAGTGCTTGCCACCACCAGAT GAGAAGTTAAGCAGCCTTTCTGTGGAGAGTGAGAATAATTGTGTACAAAGTAGAGAAGTATCCAATTATGTGACA ACCTTTGTGTAATAAAAATTTGTTTAA

142/2825 FIGURE 125

MLRLPTVFRQMRPVSRVLAPHLTRAYAKDVKFGADARALMLQGVDLLADAVAVTMGPKGRTVIIEQGWGSPKVTK DGVTVAKSIDLKDKYKNIGAKLVQDVANNTNEEAGDGTTTATVLARSIAKEGFEKISKGANPVEIRRGVMLAVDA VIAELKKQSKPVTTPEEIAQVATISANGDKEIGNIISDAMKKVGRKGVITVKDGKTLNDELEIIEGMKFDRGYIS PYFINTSKGQKCEFQDAYVLLSEKKISSIQSIVPALEIANAHRKPLVIIAEDVDGEALSTLVLNRLKVGLQVVAV KAPGFGDNRKNQLKDMAIATGGAVFGEEGLTLNLEDVQPHDLGKVGEVIVTKDDAMLLKGKGDKAQIEKRIQEII EQLDVTTSEYEKEKLNERLAKLSDGVAVLKVGGTSDVEVNEKKDRVTDALNATRAAVEEGIVLGGGCALLRCIPA LDSLTPANEDQKIGIEIIKRTLKIPAMTIAKNAGVEGSLIVEKIMQSSSEVGYDAMAGDFVNMVEKGIIDPTKVV RTALLDAAGVASLLTTAEVVVTEIPKEEKDPGMGAMGGMGGGMGGGMF

FIGURE 126

144/2825 FIGURE 127

MYEQLKGEWNRKSPNLSKCGEELGRLKLVLLELNFLPTTGTKLTKQQLILARDILEIGAQWSILRKDIPSFERYM AQLKCYYFDYKEQLPESAYMHQLLGLNLLFLLSQNRVAEFHTELERLPAKDIQTNVYIKHPVSLEQYLMEGSYNK VFLAKGNIPAESYTFFIDILLDTIRDEIAGCIEKAYEKILFTEATRILFFNTPKKMTDYAKKRGWVLGPNNYYSF ASQQQKPEDTTIPSTELAKQVIEYARQLEMIV

145/2825 FIGURE 128A

GTGGTGTCGGTGTCGCCAGCATCCCCGGCGCCCTTGCTGCGGTCGCCGGAGCCCTCGGCCTCTGTTCTCCTCCCCC ${\tt TCCCGCCCTTACCTCCACGCGGGACCGCCCGCCCAGTCAACTCCTCGCACTTTGCCCCTGCTTGGCAGCGGATA}$ AAAGGGGGCTGAGGAAATACCGGACACGTCCACCCGTTGCCAGCTCTAGCCTTTAAATTCCCGGCTCGGGACCTC ACCGCAGTCCTCCGGCGACCCCGAACTCCGCTCCGGAGCCTCAGCCCCCTGGAAAGTGATCCCGGCATCGGAGAG ${\tt CCAAGATGCCGGCCCACTTGCTGCAGGACGATATCTCTAGCTCCTATACCACCACCACCACCATTACAGCGCCTC}$ $\verb|CCTCCAGGGTCCTGCAGAATGGAGGAGATAAGTTGGAGACGATGCCCCTCTACTTGGAAGACGACATTCGCCCTG|\\$ GAAACATCATCCTTATGTCTCTGCTACACTTGGGAGCCCTGTATGGGATCACTTTGATTCCTACCTGCAAGTTCT ACACCTGGCTTTGGGGGGGTATTCTACTATTTTGTCAGTGCCCTGGGCATAACAGCAGGAGCTCATCGTCTGTGGA GCCACCGCTCTTACAAAGCTCGGCTGCCCCTACGGCTCTTTCTGATCATTGCCAACACAATGGCATTCCAGAATG ATGTCTATGAATGGGCTCGTGACCACCGTGCCCACCACAAGTTTTCAGAAACACATGCTGATCCTCATAATTCCC GACGTGGCTTTTCTCTCTCACGTGGGTTGGCTGCTTGTGCGCAAACACCCAGCTGTCAAAGAGAAGGGGAGTA CGCTAGACTTGTCTGACCTAGAAGCTGAGAAACTGGTGATGTTCCAGAGGAGGTACTACAAACCTGGCTTGCTGC TGATGTGCTTCATCCTGCCCACGCTTGTGCCCTGGTATTTCTGGGGTGAAACTTTTCAAAACAGTGTGTTCGTTG $\tt CCACTTTCTTGCGATATGCTGTTGTTGATGCCACCTTGGCTGATAACAGTGCTGCCCACCTCTTCGGATATC$ GTCCTTATGACAAGAACATTAGCCCCCGGGAGAATATCCTGGTTTCACTTGGAGCTGTGGGTGAGGGCTTCCACA ACTACCACCACTCCTTTCCCTATGACTACTCTGCCAGTGAGTACCGCTGGCACATCAACTTCACCACATTCTTCA TTGATTGCATGGCCGCCTCGGTCTGGCCTATGACCGGAAGAAGTCTCCAAGGCCGCCATCTTGGCCAGGATTA GCAGAGGTTTTAATGTCTGTTTATTAACTACTGAATAATGCTACCAGGATGCTAAAGATGATGATGTTAACCCAT TCCAGTACAGTATTCTTTTAAAATTCAAAAGTATTGAAAGCCAACAACTCTGCCTTTATGATGCTAAGCTGATAT TATTTCTTCTCTTATCCTCTCTCTCTCTAGGCCCATTGTCCTCCTTTTCACTTTAATCGCCCTCCTTTCCCTTA TTGCCTCCCAGGCAAGCAGCTGGTCAGTCTTTGCTCAGTGTCCAGCTTCCAAAGCCTAGACAACCTTTCTGTAGC CTAGAGATAAAACAGAATCTTCTGGGTAGTCCCCTGTTGATTATCTTCAGCCCAGGCTTTTGCTAGATGGAATGG AAAAGCAACTTCATTTGACACAAAGCTTCTAAAGCXAGGTAAATTGTCGGGGGAGAGAGTTAGCATGTATGAATG CCACCACATAGCATGCTTCCTTTCTCTCCTGGCTCGGGGTAAAAAGTGGCTGCGGTGTTTGGCAATGCTAATTCA ATGCCGCAACATATAGTTGAGGCCGAGGATAAAGAAAAGACATTTTAAGTTTGTAGTAAAAGTGGTCTCTGCTGG GGAAGGGTTTTCTTTTCTTTTTTCTTTAATAACAAGGAGATTTCTTAGTTCATATATCAAGAAGTCTTGAAGTT GGGTGTTTCCAGAATTGGTAAAAACAGCAGCTCATAGAATTTTGAGTATTCCATGAGCTGCTCATTACAGTTCTT TCCTCTTTCTGCTCTGCCATCTTCAGGATATTGGTTCTTCCCCTCATAGTAATAAGATGGCTGTGGCATTTCCAA TTAGAACGTTAAACTATTAGAGTATTTCCCTTCCAAAGAGGGATGTTTGGAAAAAACTCTGAAGGAGAGGAGAAAA TTAGTTGGGATGCCAATTTCCTCTCCACTGCTGGACATGAGATGGAGAGGCTGAGGGACAGGATCTATAGGCAGC AGCCTAAAGTATACAAACTGCCTGGGGGGCAGGGTTAGGAATCTCTTCACTACCCTGATTCTTGATTCCTGGCTC TACCCTGTCTGTCCCTTTTCTTTGACCAGATCTTTCTCTTCCCTGAACGTTTTCTTCTTTCCTGGACAGGCAGC ACACCCTGTGCTCCCCTGCCACACTGATGGCTCAAGACAAGGCTGGCAAACCCTCCCAGAAACATCTCTGGCCC AAAAGAGGGTTTATTTTCAGTCCCCTCTCTCTGGGTCAGAACCAGAGGGCATGCTGAATGCCCCCTGCTTACTTG GTGAGGGTGCCCCGCCTGAGTCAGTGCTCTCAGCTGCCAGTGCAATGCTTGTAGAAGTAGGAGGAAACAGTTCTC ACTGGGAAGAAGCAAGGGCAAGAACCCAAGTGCCTCACCTCGAAAGGAGGCCCTGTTCCCTGGAGTCAGGGTGAA

FIGURE 128B

CTGCAAAGCTTTGGCTGAGACCTGGGATTTGAGATACCACAAACCCTGCTGAACACAGTGTCTGTTCAGCAAACT CTTGGACCACTCCTGTCCCTGTAGCTCAGTCATCAAAGCAGAAGTCTGGCTTTGCTCTATTAAGATTGGAAATGT ACACTACCAAACACTCAGTCCACTGTTGAGCCCCAGTGCTGGAAGGGAGGAAGGCCTTTCTTCTGTGTTAATTGC GTAGAGGCTACAGGGGTTAGCCTGGACTAAAGGCATCCTTGTCTTTGAGCTATTCACCTCAGTAGAAAAGGATCT AAGGGAAGATCACTGTAGTTTAGTTCTGTTGACCTGTGCACCTACCCCTTGGAAATGTCTGCTGGTATTTCTAAT TCCACAGGTCATCAGATGCCTGCTTGATAATATATAAACAATAAAAACAACTTTCACTTCTTCCTATTGTAATCG TGTGCCATGGATCTGATCTGTACCATGACCCTACATAAGGCTGGATGGCACCTCAGGCTGAGGGCCCCAATGTAT GTGTGGCTGTGGGTGTGGGAGTGTCTCTGCTGAGTAAGGAACACGATTTTCAAGATTCTAAAGCTCAATTC AAGTGACACATTAATGATAAACTCAGATCTGATCAAGAGTCCGGATTTCTAACAGTCCTTGCTTTGGGGGGGTGTG $\tt CTGGCAACTTAGCTCAGGTGCCTTACATCTTTTCTAATCACAGTGTTGCATATGAGCCTGCCCTCACTCCTCTG$ CAGAATCCCTTTGCACCTGAGACCCTACTGAAGTGGCTGGTAGAAAAAGGGGCCTGAGTGGAGGATTATCAGTAT CACGATTTGCAGGATTCCCTTCTGGGCTTCATTCTGGAAACTTTTGTTAGGGCTGCTTTTCTTAAGTGCCCACAT TAGCATTTAAAATGGAAAATTTTCTCCTTGGTTTGCTAGTATCTTGGGTGTATTCTCTGTAAGTGTAGCTCAAAT AGGTCATCATGAAAGGTTAAAAAAGCGAGGTGGCCATGTTATGCTGGTGGTTGCCAGGGCCTCCAACCACTGTGC CACTGACTTGCTGTGTGACCCTGGGCAAGTCACTTAACTATAAGGTGCCTCAGTTTTCCTTCTGTTAAAATGGGG ATAATAATACTGACCTACCTCAAAGGGCAGTTTTGAGGCATGACTAATGCTTTTTAGAAAGCATTTTGGGATCCT TCAGCACAGGAATTCTCAAGACCTGAGTATTTTTTATAATAGGAATGTCCACCATGAACTTGATACGTCCGTGTG GCCAGACAAAATTTGAGAATACATAAACAACGCATTGCCACGGAAACATACAGAGGATGCCTTTTCTGTGATTGG GTGGGATTTTTTCCCTTTTTATGTGGGATATAGTAGTTACTTGTGACAAGAATAATTTTGGAATAATTTCTATTA ATATCAACTCTGAAGCTAATTGTACTAATCTGAGATTGTTCTTCATAATAAAAGTGAAGTGAATCTGATTGC ACTG

147/2825 FIGURE 129

MPAHLLQDDISSSYTTTTTITAPPSRVLQNGGDKLETMPLYLEDDIRPDIKDDIYDPTYKDKEGPSPKVEYVWRN IILMSLLHLGALYGITLIPTCKFYTWLWGVFYYFVSALGITAGAHRLWSHRSYKARLPLRLFLIIANTMAFQNDV YEWARDHRAHHKFSETHADPHNSRRGFFFSHVGWLLVRKHPAVKEKGSTLDLSDLEAEKLVMFQRRYYKPGLLLM CFILPTLVPWYFWGETFQNSVFVATFLRYAVVLNATWLVNSAAHLFGYRPYDKNISPRENILVSLGAVGEGFHNY HHSFPYDYSASEYRWHINFTTFFIDCMAALGLAYDRKKVSKAAILARIKRTGDGNYKSG

148/2825 FIGURE 130

GACTGCAGTTGCCACCTTCCTCTATGCGGAGGTCTTTGTTGTTGTTGTTTCTCTCATTCCCTTCATTTCTCCTAA ${\tt AAGATGGCAGAAGATTTTCAAGTCCCGGCTGGTGGAGTTGTTAGTGTCCTATGGCAACACCTTCTTTGTGGTTCT}$ CATTGTCATCCTTGTGCTGTTGGTCATCGATGCCGTGCGCGAAATTCGGAAGTATGATGATGTGACGGAAAAGGT GAACCTCCAGAACATCCCGGGGCCATGGAGCACTTCCACATGAAGCTTTTCCGTGCCCAGAGGAATCTCTACAT TGCTGGCTTTTCCTTGCTGCTGTCCTTCCTGCTTAGACGCCTGGTGACTCTCATTTCGCAGCAGGCCACGCTGCT GGCCTCCAATGAAGCCTTTAAAAAGCAGGCGGAGAGTGCTAGTGAGGCGGCCAAGAAGTACATGGAGGAGAATGA CCAGCTCAAGAAGGGAGCTGCTGTTGACGGAGGCAAGTTGGATGTCGGGAATGCTGAGGTGAAGTTGGAGGAAGA GAACAGGAGCCTGAAGGCTGACCTGCAGAAGCTAAAGGACGAGCTGGCCAGCACTAAGCAAAAACTAGAGAAAGC TGAAAACCAGGTTCTGGCCATGCGGAAGCAGTCTGAGGGCCTCACCAAGGAGTACGACCGCTTGCTGGAGGAGCA CCTTCTGCTTCCCCCATTCCCTTCCACAGCTCATAGCTCGTCATCTCGGCCCTTGTCCACACTCTCCAAGCACAT TACAGGGGACCTGATTGCTACACGTTCAGAATGCGTTTGCTGTCATCCTGCTTGGCCTGGCCAGGCCTGGCACAG GGTTTGAGCCCCTTTTTGTTTTGCCCTCTGGGTGTTTTCTTTGGTCCCGCAGGAGGGTGGGAACAGGTGGAC TGGAGTTTCTCTTGAGGGCAATAAAAGTTTTCATGGTGG

149/2825 FIGURE 131

MSLQWTAVATFLYAEVFVVLLLCIPFISPKRWQKIFKSRLVELLVSYGNTFFVVLIVILVLLVIDAVREIRKYDD VTEKVNLQNNPGAMEHFHMKLFRAQRNLYIAGFSLLLSFLLRRLVTLISQQATLLASNEAFKKQAESASEAAKKY MEENDQLKKGAAVDGGKLDVGNAEVKLEEENRSLKADLQKLKDELASTKQKLEKAENQVLAMRKQSEGLTKEYDR LLEEHAKLQAAVDGPMDKKEE

150/2825 FIGURE 132

GTGGTGCGACCACGGCTCACGCCTCAGCCACCCAGATGTAAGCGATCTGGTTCCCACCTCAGCCTCCCGAG ${\tt TAGTGGATCTAGGATCCGGCTTCCAAC} \textbf{ATG} {\tt TGGCAGCTCTGGGCCTCCTCTGCTGCTGCTGGTGTTGGCCAAT}$ GCCCGGAGCAGGCCCTCTTTCCATCCCTGTCGGATGAGCTGGTCAACTATGTCAACAAACGGAATACCACGTGG ${\tt CAGTGTCCCACCATCAAAGAGATCAGAGACCAGGGCTCCTGTGGCTCCTGCTGGGCCTTCGGGGCTGTGGAAGCC}$ ATCTCTGACCGGATCTGCATCCACACCAATGCGCACGTCAGCGTGGAGGTGTCGGCGGAGGACCTGCTCACATGC TGTGGCAGCATGTGTGGGGACGGCTGTAATGGTGGCTATCCTGCTGAAGCTTGGAACTTCTGGACAAGAAAAGGC $\tt CCGACCTACAAACAGGACAAGCACTACGGATACAATTCCTACAGCGTCTCCAATAGCGAGAAGGACATCATGGCC$ GAGATCTACAAAAACGGCCCCGTGGAGGGAGCTTTCTCTGTGTATTCGGACTTCCTGCTCTACAAGTCAGGAGTG TACCAACACGTCACCGGAGAGTGATGGCTGGCCATGCCATCCTGGGCTGGGGAGTGGAGAATGGCACA CCCTACTGGCTGGTTGCCAACTCCTGGAACACTGACTGGGGTGACAATGGCTTCTTTAAAATACTCAGAGGACAG GCCGTGGGCCTGTCGTGCCAGTCCTGGGGGCGAGATCGGGGTAGAAATGCATTTTATTCTTTAAGTTCACGTAAG ATACAAGTTTCAGGCAGGGTCTGAAGGACTGGATTGGCCAAACATCAGACCTGTCTTCCAAGGAGACCAAGTCCT GGCTACATCCCAGCCTGTGGTTACAGTGCAGACAGGCCATGTGAGCCACCGCTGCCAGCACAGAGCGTCCTTCCC CCTGTAGACTAGTGCCGTGGGAGTACCTGCTGCCCAGCTGCTGTGGCCCCCTCCGTGATCCATCTCCAGGG AGCAAGACAGAGACGCAGGATGGAAAGCGGAGTTCCTAACAGGATGAAAGTTCCCCCATCAGTTCCCCCAGTACC ${\tt TCCAAGCAAGTAGCTTTCCACATTTGTCACAGAAATCAGAGGAGAGATGGTGTTGGGAGCCCTTTGGAGAACGCC}$ AGTCTCCAGGTCCCCTGCATCTATCGAGTTTGCAATGTCACAACCTCTCTGATCTTGTGCTCAGCATGATTCTT TAATAGAAGTTTTATTTTTCGTGCACTCTGCTAATCATGTGGGTGAGCCAGTGGAACAGCGGGAGCCTGTGCTGG TTTGCAGATTGCCTCCTAATGACGCGGCTCAAAAGGAAACCAAGTGGTCAGGAGTTGTTTCTGACCCACTGATCT CTACTACCACAAGGAAAATAGTTTAGGAGAAACCAGCTTTTACTGTTTTTTGAAAAATTACAGCTTCACCCTGTCA AGTTAACAAGGAATGCCTGTGCCAATAAAAGGTTTCTCCAACTTGA

151/2825 FIGURE 133

MWQLWASLCCLLVLANARSRPSFHPLSDELVNYVNKRNTTWQAGHNFYNVDMSYLKRLCGTFLGGPKPPQRVMFT EDLKLPASFDAREQWPQCPTIKEIRDQGSCGSCWAFGAVEAISDRICIHTNAHVSVEVSAEDLLTCCGSMCGDGC NGGYPAEAWNFWTRKGLVSGGLYESHVGCRPYSIPPCEHHVNGSRPPCTGEGDTPKCSKICEPGYSPTYKQDKHY GYNSYSVSNSEKDIMAEIYKNGPVEGAFSVYSDFLLYKSGVYQHVTGEMMGGHAIRILGWGVENGTPYWLVANSW NTDWGDNGFFKILRGQDHCGIESEVVAGIPRTDQYWEKI

152/2825 FIGURE 134A

TGATCACTGGTTGGAGTTCAGTGCTACAAAATTATCTTCATGTGATTCCTTTACTTCTACAATTAATGAACTCAA TCATTGCCTGTCTCTGAGAACATACTTAGTTGGAAACTCCTTGAGTTTAGCAGATTTATGTGTTTTGGGCCACCCT AAAAGGAAATGCTGCCTGGCAAGAACAGTTGAAACAGAAGAAGAAGCTCCAGTTCATGTAAAACGTTGGTTTGGCTT $\verb|TCTTGAAGCCCAGCAGGCCTTCCAGTCAGTAGGTACCAAGTGGGATGTTTCAACAACCAAAGCTCGAGTGGCACC| \\$ TGAGAAAAAGCAAGATGTTGGGAAATTTGTTGAGCTTCCAGGTGCGGAGATGGGAAAGGTTACCGTCAGATTTCC TCCAGAGGCCAGTGGTTACTTACACATTGGGCATGCAAAAGCTGCTCTTCTGAACCAGCACTACCAGGTTAACTT ${\tt TAAAGGGAAACTGATCATGAGATTTGATGACACAAATCCTGAAAAAGGAAAGGAAGATTTTGAGAAGGTTATCTT}$ GGAAGATGTTGCAATGTTGCATATCAAACCAGATCAATTTACTTATACTTCGGATCATTTTGAAACTATAATGAA GTATGCAGAGAGCTAATTCAAGAAGGGAAGGCTTATGTGGATGATACTCCTGCTGAACAGATGAAAGCAGAACG TGAGCAGAGGATAGAATCTAAACATAGAAAAAACCCTATTGAGAAGAATCTACAAATGTGGGGAAGAAATGAAAAA AGGGAGCCAGTTTGGTCACTCCTGTTGTTTGCGAGCAAAAATTGACATGAGTAACAATGGATGCATGAGAGA TTTTGCCTGCCCCATAGTTGACAGCATCGAAGGTGTTACACATGCCCTGAGAACAACAGAATACCATGACAGAGA TGAGCAGTTTTACTGGATTATTGAAGCTTTAGGCATAAGAAAACCATATATTTGGGAATATAGTCGGCTAAATCT AAGATTTCCTACGGTTCGTGGTGTACTGAGAAGAGGGGTTGACAGTTGAAGGACTGAAACAGTTTATTGCTGCTCA GGGCTCCTCACGTTCAGTCGTGAACATGGAGTGGGACAAAATCTGGGCGTTTAACAAAAAGGTTATTGACCCAGT GGCTCCACGATATGTTGCATTACTGAAGAAGAAGTGATCCCAGTGAATGTACCTGAAGCTCAGGAGGAGATGAA AGAAGTAGCCAAACACCCAAAGAATCCTGAGGTTGGCTTGAAGCCTGTGTGTATAGTCCCAAAGTTTTCATTGA AGGTGCTGATGCAGAGACTTTTTCGGAGGGTGAGATGGTTACATTTATAAATTGGGGCAACCTCAACATTACAAA AATACACAAAAATGCAGATGGAAAAATCATATCTCTTGATGCAAAGTTTAATTTGGAAAACAAAGACTACAAGAA AACCACTAAGGTCACTTGGCTTGCAGAGACTACACATGCTCTTCCTATTCCAGTAATCTGTGTCACTTATGAGCA CTTGATCACAAAGCCAGTGCTAGGAAAAGACGAGGACTTTAAGCAGTATGTCAACAAGAACAGTAAGCATGAAGA GCTAATGCTAGGGGATCCCTGCCTTAAGGATTTGAAAAAAGGAGATATTATACAACTCCAGAGAAGAGGATTCTT CATATGTGATCAACCTTATGAACCTGTTAGCCCATATAGTTGCAAGGAAGCCCCGTGTGTTTTGATATACATTCC TGATGGGCACACAAGGAAATGCCAACATCAGGGTCAAAGGAAAAGACCAAAGTAGAAGCCACAAAAAATGAGAC $\verb|CTCTGCTCCTTTTAAGGAAAGACCAACACCTTCTCTGAATAATAATTGTACTACATCTGAGGATTCCTTGGTCCT| \\$ TTACAATAGAGTGGCTGTTCAAGGAGATGTGGTTCGTGAATTAAAAGCCAAGAAAGCACCAAAGGAAGATGTAGA TGCAGCTGTAAAACAGCTTTTGTCTTTGAAAGCTGAATATAAGGAGAAAACTGGCCAGGAATATAAACCTGGAAA CCCTCCTGCTGAAATAGGACAGAATATTTCTTCTAATTCCTCAGCAAGTATTCTGGAAAGTAAATCTCTGTATGA TGTAGAATGCTTACTGTCCCTGAAGGCTCAGTATAAAGAAAAAACTGGGAAGGAGTACATACCTGGTCAGCCCCC ATTATCTCAAAGTTCGGATTCAAGCCCAACCAGAAATTCTGAACCTGCTGGTTTAGAAACACCAGAAGCGAAAGT ACTTTTTGACAAAGTAGCTTCTCAAGGGGAAGTAGTTCGGAAACTTAAAACTGAAAAAGCCCCTAAGGATCAAGT AGATATAGCTGTTCAAGAACTCCTTCAGCTAAAGGCACAGTACAAGTCTTTGATAGGAGTAGAGTATAAGCCTGT TCAGAAACAAATGATGGCCAAAGGAAAGACCCTTCTAAAAACCAAGGAGGTGGGCTCTCATCAAGTGGAGCAGG TTCTCAGGTCATCACAAAGTCAGAAATGATTGAATACCATGACATAAGTGGCTGTTATATTCTTCGTCCCTGGGC CTATGCCATTTGGGAAGCCATCAAGGACTTTTTTGATGCTGAGATCAAGAAACTTGGTGTTGAAAACTGCTACTT CCCCATGTTTGTGTCTCAAAGTGCATTAGAGAAAGAGACGACTCATGTTGCTGACTTTGCCCCAGAGGTTGCTTG GGTTACAAGATCTGGCAAAACCGAGCTGGCAGAACCAATTGCCATTCGTCCTACTAGTGAAACAGTAATGTATCC TGCATATGCAAAATGGGTACAATCACACAGAGACCTGCCCATCAAGCTCAATCAGTGGTGCAATGTGGTGCGTTG GGAATTCAAGCATCCTCAGCCTTTCCTACGTACTCGTGAATTTCTTTGGCAGGAAGGGCACAGTGCTTTTGCTAC ${\tt CATGGAAGAGGCAGCGGAAGAGGTCTTGCAGATACTTGACTTATATGCTCAGGTATATGAAGAACTCCTGGCAAT}$ TCCTGTTGTTAAAGGAAGAAGACGGAAAAGGAAAAATTTGCAGGAGGAGACTATACAACTACAATAGAAGCATT TATATCTGCTAGTGGAAGAGCTATCCAGGGAGGAACATCACATCATTTAGGGCAGAATTTTTCCAAAATGTTTGA

153/2825 FIGURE 134B

154/2825 FIGURE 135

MEHTEIDHWLEFSATKLSSCDSFTSTINELNHCLSLRTYLVGNSLSLADLCVWATLKGNAAWQEQLKQKKAPVHV KRWFGFLEAQQAFQSVGTKWDVSTTKARVAPEKKQDVGKFVELPGAEMGKVTVRFPPEASGYLHIGHAKAALLNQ HYQVNFKGKLIMRFDDTNPEKEKEDFEKVILEDVAMLHIKPDQFTYTSDHFETIMKYAEKLIQEGKAYVDDTPAE QMKAEREQRIESKHRKNPIEKNLQMWEEMKKGSQFGHSCCLRAKIDMSSNNGCMRDPTLYRCKIQPHPRTGNKYN VYPTYDFACPIVDSIEGVTHALRTTEYHDRDEQFYWIIEALGIRKPYIWEYSRLNLNNTVLSKRKLTWFVNEGLV DGWDDPRFPTVRGVLRRGMTVEGLKQF1AAQGSSRSVVNMEWDKIWAFNKKVIDPVAPRYVALLKKEVIPVNVPE AOEEMKEVAKHPKNPEVGLKPVWYSPKVFIEGADAETFSEGEMVTFINWGNLNITKIHKNADGKIISLDAKFNLE $\tt NKDYKKTTKVTWLAETTHALPIPVICVTYEHLITKPVLGKDEDFKQYVNKNSKHEELMLGDPCLKDLKKGDIIQL$ QRRGFFICDQPYEPVSPYSCKEAPCVLIYIPDGHTKEMPTSGSKEKTKVEATKNETSAPFKERPTPSLNNNCTTS EDSLVLYNRVAVOGDVVRELKAKKAPKEDVDAAVKQLLSLKAEYKEKTGQEYKPGNPPAEIGQNISSNSSASILE SKSLYDEVAAQGEVVRKLKAEKSPKAKINEAVECLLSLKAQYKEKTGKEYIPGQPPLSQSSDSSPTRNSEPAGLE TPEAKVLFDKVASQGEVVRKLKTEKAPKDQVDIAVQELLQLKAQYKSLIGVEYKPVSATGAEDKDKKKKEKENKS EKONKPOKONDGORKDPSKNOGGGLSSSGAGEGOGPKKOTRLGLEAKKEENLADWYSQVITKSEMIEYHDISGCY ILRPWAYAIWEAIKDFFDAEIKKLGVENCYFPMFVSQSALEKEKTHVADFAPEVAWVTRSGKTELAEPIAIRPTS ETVMYPAYAKWVQSHRDLPIKLNQWCNVVRWEFKHPQPFLRTREFLWQEGHSAFATMEEAAEEVLQILDLYAQVY EELLAIPVVKGRKTEKEKFAGGDYTTTIEAFISASGRAIQGGTSHHLGQNFSKMFEIVFEDPKIPGEKQFAYQNS WGLTTRTIGVMTMVHGDNMGLVLPPRVACVQVVIIPCGITNALSEEDKEALIAKCNDYRRRLLSVNIRVRADLRD NYSPGWKFNHWELKGVPIRLEVGPRDMKSCQFVAVRRDTGEKLTVAENEAETKLQAILEDIQVTLFTRASEDLKT ${\tt HMVVANTMEDFQKILDSGKIVQIPFCGEIDCEDWIKKTTARDQDLEPGAPSMGAKSLCIPFKPLCELQPGAKCVC}$ GKNPAKYYTLFGRSY

155/2825 FIGURE 136

TCCCAACTTTGAGGCCAATACCACCGTCGGCCGCATCCGTTTCCACGACTTTCTGGGAGACTCATGGGGCATTCT CTTCTCCCACCTCGGGACTTTACCCCAGTGTGCACCACAGAGCTTGGCAGAGCTGCAAAGCTGGCACCAGAATT TGCCAAGAGGAATGTTAAGTTGATTGCCCTTTCAATAGACAGTGTTGAGGACCATCTTGCCTGGAGCAAGGATAT CAATGCTTACAATTGTGAAGAGCCCACAGAAAAGTTACCTTTTCCCATCATCGATGATAGGAATCGGGAGCTTGC CATCCTGTTGGGCATGCTGGATCCAGCAGAGAGGATGAAAAGGGCATGCCTGTGACAGCTCGTGTGGTGTTTGT TTTTGGTCCTGATAAGAAGCTGAAGCTGTCTATCCTCTACCCAGCTACCACTGGCAGGAACTTTGATGAGATTCT CAGGGTAGTCATCTCTCCCAGCTGACAGCAGAAAAAAGGGTTGCCACCCCAGTTGATTGGAAGGATGGGGATAG TGTGATGGTCCTTCCAACCATCCCTGAAGAAGAAGCCAAAAAACTTTTCCCGAAAGGAGTCTTCACCAAAGAGCT CCCATCTGGCAAGAATACCTCCGCTACACACCCCAGCCT**TAA**GTCTCTTGGAGAAGTTGGTGCTGTGAGCCAGA GGATGTCAGCTGCCAATTGTGTTTTCCTGCAGCAATTCCATAAACACATCCTGGTGTCATCACAGCCAAGGTTTT TAGGTTGCTATACCAATGGCTTATTAAATGAAAATGGCACTAAAAGTTTCTTGAGATTCTTTATACTCTCTGCCT TCAGCAATCAATTCCATTCATACATCAGCACTCTGCTGGTTCTGTTTTGAAATATGTTCTGTATTTAAAACTCAAA GAACTTGAAGTTCAACTTCCTCTGTAAATATCCAAGTATAAAGCCCAGGAACTTCTAGAATAACCCAGATGCGCT TTAATTTTTTTTAATATGTTTTGATCACAGAACTTCTAGAATAACCCAGATGCTCTTTCATATTCTTTTAATACA TCTTGATCACAGCTGGGGGAAAAAAAGCTTTTTAATTCTGTACCTTCCTAGTAGATAAGTGAAGAGCAGGGAAAG AGACCTTTAAATATTTTGCTATAAAAAAATTTGTGATAAGTTTCTATCAAAATGGGGAGATTGCAGAAAAGGCTT $\verb|CCCTTGGCTCCCAAGGAGGTGTAGCAGGTGTGAGCAATATTAGTGCCATGTGCCTTTCACACAGGGTTTGCATTT| \\$ TTAGTATAGAACTCTTCTTGCAGTGGGTTGCTATTTTCTAGATTTTACTTTTTAGGGAACAAAATAAAATCCTTT GTT

156/2825 FIGURE 137

MPGGLLLGDVAPNFEANTTVGRIRFHDFLGDSWGILFSHPRDFTPVCTTELGRAAKLAPEFAKRNVKLIALSIDS VEDHLAWSKDINAYNCEEPTEKLPFPIIDDRNRELAILLGMLDPAEKDEKGMPVTARVVFVFGPDKKLKLSILYP ATTGRNFDEILRVVISLQLTAEKRVATPVDWKDGDSVMVLPTIPEEEAKKLFPKGVFTKELPSGKKYLRYTPQP

157/2825 FIGURE 138

CAGAGTGCCCTTTCTCCCCGCCTCTTCCCCCTCCCGGGAGCTGCCAGTACTTGACGTGGCGTCACCGCCCTCTAC GGTTCTCTTGTGGCCACCGTCGCTGTCCGGCTGCCTTGGGCTGCCGAACAGACAAGGCGTGGGCCACAGCACCTC AGAAGCCGACGCAGCTCGACGCAGGGGCCGGCAGGAGGGTGGGCGATCGCGTGTCGGAGGGCGCCGCGGGCAG TGCCTGACGCGATGCCGCTGCCCGGGGTCGGGGAGGAGCTGAAGCAGGCCAAGGAGATCGAGGACGCCGAGAAGT ACTCCTTCATGGCCACCGTCACCAAGGCGCCCAAGAAGCAAATCCAGTTTGCTGATGACATGCAGGAGTTCACCA CTGCATCCTACACAGATAGCTCTGATGATGAGGGTTTCTCCCCGAGAGAAGCAGCAAACCAACTCCAAGGGCAGCA GCAATTTCTGTGTGAAGAACATCAAGCAGGCAGAATTTGGACGCCGGGAGATTGAGATTGCAGAGCAAGACATGT ACATCACAGCCCAGACAGCGGTGTTGATTGAGACACTCTGTGCCCTGGGGGGCTCAGTGCCGCTGGTCTGTA ACATCTACTCAACTCAGAATGAAGTAGCTGCAGCACTGGCTGAGGCTGGAGTTGCAGTGTTCGCTTGGAAGGGCG ATGATGGGGGGAGACTTAACCCACTGGGTTTATAAGAAGTATCCAAACGTGTTTAAGAAGATCCGAGGCATTGTGG AAGAGAGCGTGACTGGTGTTCACAGGCTGTATCAGCTCTCCAAAGCTGGGAAGCTCTGTGTTCCGGCCATGAACG TCAATGATTCTGTTACCAAACAGAAGTTTGATAACTTGTACTGCTGCCGAGAATCCATTTTGGATGGCCTGAAGA CTGCTCTCAAAGCTCTTGGAGCAATTGTCTACATTACCGAAATCGACCCCATCTGTGCTCTGCAGGCCTGCATGG ATGGGTTCAGGGTGGTAAAGCTAAATGAAGTCATCCGGCAAGTCGATGTCGTAATAACTTGCACAGGAAATAAGA ATGTAGTGACACGGGAGCACTTGGATCGCATGAAAAACAGTTGTATCGTATGCAATATGGGCCACTCCAACACAC AAATCGATGTGACCAGCCTCCGCACTCCGGAGCTGACGTGGGAGCGAGTACGTTCTCAGGTGGACCATGTCATCT GGCCAGATGGCAAACGAGTTGTCCTCCTGGCAGAGGGTCGTCTACTCAATTTGAGCTGCTCCACAGTTCCCACCT TTGTTCTGTCCATCACAGCCACAACACAGGCTTTGGCACTGATAGAACTCTATAATGCACCEGAGGGGCGATACA AGCAGGATGTGTACTTGCTTCCTAAGAAAATGGATGAATACGTTGCCAGCTTGCATCTGCCATCATTTGATGCCC ACCTTACAGAGCTGACAGATGACCAAGCAAAATATCTGGGACTCAACAAAAATGGGCCATTCAAACCTAATTATT ACAGATAC**TAA**TGGACCATACTACCAAGGACCAGTCCACCTGAACCACACTCTAAAGAAATATTTTTTAAGAT AACTTTTATTTTCTTCTTACTCCTTTCCTCTTGATTTTTTCCTATAATTTCATTCTTGTTTTTTCATCTCATTA TCCAAGTTCTGCAGACCACACAGGAACTTGCTTCATGGCTCTTTAGATGAAATAGAAGTTCAGGGTCCCTCACTC TAGTCACTAAAGAAGGATTTTACTCCCCCAGCCCAGAAAGGTGATTCTTCTCTTTACCATTTCTGGGGACTTTAG TCTTAATTAGGTACCTTATTAACAGGAAATGCTAAGGTACCTTCTCTGTGGAACAATCTGCAATGTCTAAATCGC CTTAAAAGAGCCCATTTCTTAGCTGCTGAAATCAGTGCTCTTTCACTTCTTCAGAGAAGCAGGGGATGGTACCTAC CCGGCAGGTAGGTTAGATGTGGGTGGTGCATGTTAATTTCCCTTAGAAGTTCCAAGCCCTGTTTCCTGCGTAAAG GTGGTATGTCCAGTTCAGAGATGTGTATAATGAGCATGGCTTGTTAAGATCAGGAGGCCCACTTGGATTTATAGT ATAGCCCTTCCTCCACTCCACCAGACTTGCTCATTTTTCGAGTTTTTAACTAGACTACACTCTATTTGAGTTTA

158/2825 FIGURE 139

MSMPDAMPLPGVGEELKQAKEIEDAEKYSFMATVTKAPKKQIQFADDMQEFTKFPTKTGRRSLSRSISQSSTDSY SSAASYTDSSDDEVSPREKQQTNSKGSSNFCVKNIKQAEFGRREIEIAEQDMSALISLRKRAQGEKPLAGAKIVG CTHITAQTAVLIETLCALGAQCRWSACNIYSTQNEVAAALAEAGVAVFAWKGESEDDFWWCIDRCVNMDGWQANM ILDDGGDLTHWVYKKYPNVFKKIRGIVEESVTGVHRLYQLSKAGKLCVPAMNVNDSVTKQKFDNLYCCRESILDG LKRTTDVMFGGKQVVVCGYGEVGKGCCAALKALGAIVYITEIDPICALQACMDGFRVVKLNEVIRQVDVVITCTG NKNVVTREHLDRMKNSCIVCNMGHSNTEIDVTSLRTPELTWERVRSQVDHVIWPDGKRVVLLAEGRLLNLSCSTV PTFVLSITATTQALALIELYNAPEGRYKQDVYLLPKKMDEYVASLHLPSFDAHLTELTDDQAKYLGLNKNGPFKP NYYRY

159/2825 FIGURE 140A

CCCGGGCTGTGGGCTACAGGCGCAGAGCGGGCCAGGCGCGGAGCTGGCGCAGTGACAGGAGGCGCGAACCCGCA GTGCGCCTGAAGGGGCTGGAGTTCGTGCTCATCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTC TCGCTTATCTTCGATATCTACTACTACGTGCGCGCCTGGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCAC GAGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGACCTTCATGTGCACG GGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACAAGAAGACACACAAAAAACATCATGATCAAC CTGATGGACATTCTGGAAGTGGACACCAAGAAACAGATTGTCCGTGTGGAGCCCTTGGTGACCATGGGCCAGGTG ACTGCCCTGCTGACCTCCATTGGCTGGACTCTCCCCGTGTTGCCTGAGCTTGATGACCTCACAGTGGGGGGCTTG ATCATGGGCACAGGCATCGAGTCATCATCCCACAAGTACGGCCTGTTCCAACACATCTGCACTGCTTACGAGCTG TGTGGGACGCTGGGTTTCCTGGTGGCCGCTGAGATCCGCATCATCCCTGCCAAGAAGTACGTCAAGCTGCGTTTC GAGCCAGTGCGGGGCCTGGAGGCTATCTGTGCCAAGTTCACCCACGAGTCCCAGCGGCAGGAGAACCACTTCGTG GAAGGGCTGCTCTACTCCCTGGATGAGGCTGTCATTATGACAGGGGTCATGACAGATGAGGCAGAGCCCAGCAAG GGCCTGGAGTACATTCCCTTGAGACACTACTACCACCGCCACACGCGCAGCATCTTCTGGGAGCTCCAGGACATC TGCCTGCAGCAGGCCCTGCACACCTTCCAAAACGACATCCACGTCTACCCCATCTGGCTGTGTCCGTTCATCCTG $\tt CCGCGTGTGAAACACTTTGAAGCCAGGTCCTGCATGAGGCAGCTGGAGAAGTTTGTCCGCAGCGTGCATGGCTTC$ CAGATGCTGTATGCCGACTGCTACATGAACCGGGAGGAGTTCTGGGAGATGTTTGATGGCTCCTTGTACCACAAG CTGCGAGAGAAGCTGGGTTGCCAGGACGCCTTCCCCGAGGTGTACGACAAGATCTGCAAGGCCGCCAGGCACTGA

GCTGGAGCCCGCCTGGAGAGACACGTGTGAGTGGTCAGGCATCTTCCCTTCACTCAAGCTTGGCTGCTTTC CTAGATCCACACTTTCAAAGAGAAACCCCTCCAGAACTCCCACCCTGACAGCCCCAACACCCCTCCTCCTGGCT ${\tt TCCAGGGGGCAGCCCAGTGGAATGGAAAGAATGTGGGATTTGGAGTCAGACAAGCCTGAGTCCAGTTTCCCCGTTT}$ AGAACTCATTAGCTGTGTGACTCTGGGTGAGTCCCTTAACCCCTCTGAGCCCGGGTCTCTTCATTAGTTGAAAGG GATAGTAATACCTACTTGCAGGTTGTTGTCATCTGAGTTGAGCACTGGTCACATTGAAGGTGCTGGGTAAGTGGT AGCTCTTGTTGCTTCCCGTTCAGCGTCACATCTGCAGTGGAGCCTGAAAAGGCTCCACATTAGGTCACCTGTGCA CAGCCATGGCTGGAATGATGAAGGGGATACGCTGGAGTTGCCCTGCCATCGCCTCCATCAGCCAGACGACGACGTCCT CACAGGAGAAGGACAGCTCTTCCCCACCCTGGGATCTCAGGAGGGCAGCCACGGAGTGGGGAGGCCCCAGATGCG CTGTGCCAAAGCCAGGTCCGAGGCCAAAGTTCTCCCTGCCATCCTTGGTGCCGTCCTGCCCCTTCCTCCTCATG CCTGGGCCTGCAGGCCCACCCCAGCCACCACTGAGTCCACTCGGAGTGCCCTGTGTTCCTGGAGAAGGCATTCCA GGGTTGAATCTTGTCCCAGCCTCAGCCTGGGACACCTAGGTGGAGAGAGTGGTCTCCGCTCTGAATTGGATCCAG GGGACCTGGGCTCATTCTTCTTGGCTCACCAACCCTGCAGGCCTCATCTTTCCCAAAACCCACTTTGTCTTGGTG GGAGTGGGTCCGCGCTGCTCTGCAGCAGGGGCTGGGGAGTGGACAGCATCAGGTGGGAAAGTGGAGTCCACCCTC ATGTTTCTGTAGGATTCTCACCGTGGGGCTGGAAGAAAAGAGCATCGACTTGATTTCTCCAACCACCTCATCCCTC TTTTTCTTCCTCCACCACTCCCCACCCCAGCTGTAGTTAATTTCAGTGCCTTACAAATCCTAAGCTCAGAGAAA GTTCCATTTCCGTTCCAGAGGGAAGGGAACCTCCCTAGGTCCTTCCCTGGCTTGTTATAACGCAAAGCTTGGTTG TTTATGCAACTCTATCTTAAGAACTGCCCAGCCTCAGCTGAAAACCCGAATCTGAGAAGGAATTGCGTCATGTAA GGGAAGCTGGAATTAAGGGAGCTGAGCCAGTCATGGTTGTGGCGTGTGAGTCAGGAGACCTAGGTTTCAGCCCCT CTCTACTGTCAGCGAGCTGTGCAACGTGGGCAAGTCATTGTCCTCTGAGCTGCAGTTTCCTCATCTGTCACATCG $\verb|CTACAGACAAGACCTCCCTGGAACCCTTCTGATTGTCTTAGACACTGTGGTTGCAAAACCCACGGAAAGCCTCAT| \\$ CCCCAAGGCCAGCTCCCATCTCATTTCCAGAAAGGCTCATACCTGGCTTGCAGGGAAGCATCTGTCTTGTCATTC CAGGTGCCAGAATCCTCTCAGAGTCATTGAAGGGTGTTCACCCATCCCAACCCAAGGCTTGGCACACTGCCAGTGT $\verb|CTTAGCAGGGTCTTGTGAGGGCTGGGGGGCATCCAGGCACTCAGAAGGCAAAGGAACCACCCTACCCATTTGGCCT|\\$ CTGGAGGGGGCAGAAGAAAGAAAGCCTCATCCTATATTTTACAAAGCATGTGAATTCTGGCATTAGCTCTCA TAGGAGACCCATGTGCTTCCTTGCTCAGTGCAAAACTGATGATTCTACTTGCTGTAGATGAATGGTTAACACGAG

160/2825 FIGURE 140B

161/2825 FIGURE 141

MEPAVSLAVCALLFLLWVRLKGLEFVLIHQRWVFVCLFLLPLSLIFDIYYYVRAWVVFKLSSAPRLHEQRVRDIQ KQVREWKEQGSKTFMCTGRPGWLTVSLRVGKYKKTHKNIMINLMDILEVDTKKQIVRVEPLVTMGQVTALLTSIG WTLPVLPELDDLTVGGLIMGTGIESSSHKYGLFQHICTAYELVLADGSFVRCTPSENSDLFYAVPWSCGTLGFLV AAEIRIIPAKKYVKLRFEPVRGLEAICAKFTHESQRQENHFVEGLLYSLDEAVIMTGVMTDEAEPSKLNSIGNYY KPWFFKHVENYLKTNREGLEYIPLRHYYHRHTRSIFWELQDIIPFGNNPIFRYLFGWMVPPKISLLKLTQGETLR KLYEQHHVVQDMLVPMKCLQQALHTFQNDIHVYPIWLCPFILPSQPGLVHPKGNEAELYIDIGAYGEPRVKHFEA RSCMRQLEKFVRSVHGFQMLYADCYMNREEFWEMFDGSLYHKLREKLGCQDAFPEVYDKICKAARH

FIGURE 142

163/2825 FIGURE 143

 ${\tt MVFHTAHLDISRTTMRWFRREFMQMRGQKWYSDPVHVLQAHDLGAPWSWTEEEAAQRESSWSRPALQPPLSRQPDGPARPPGMAPSHRPWLRSLGRSVTCR}$

164/2825 FIGURE 144

GGGGACCGAGTCTTTGTCCACTACACTGGCTGGCTATTAGATGGCACAAAGTTTGACTCCAGTCTGGATCGCAAG GACAAATTCTCCTTTGACCTGGGAAAAGGGGAGGTCATCAAGGCTTGGGACATTGCCATAGCCACCATGAAGGTG ATCATTCGCAGAATACAGACTCGCGGTGAAGGCTATGCTAAGCCCAATGAGGGTGCTATCGTGGAGGTTGCACTG GAAGGGTACTACAAGGACAAGCTCTTTGACCAGCGGGAGCTCCGCTTTGAGATTGGCGAGGGGGAGAACCTGGAT $\tt CTGCCTTATGGTCTGGAGAGGGCCATTCAGCGCATGGAGAAAGGAGAACATTCCATCGTGTACCTCAAGCCCAGC$ TATGCTTTTGGCAGTGTTGGGAAGGAAAAGTTCCAAATCCCACCAAATGCTGAGCTGAAATATGAATTACACCTC AAGAGTTTTGAAAAGGCCAAGGAGTCTTGGGAGATGAATTCAGAAGAGAAGCTGGAACAGAGCACCATAGTGAAA AGCAACAACGAGAAGGGCCTCTTCCGCCGGGGAGAGGCCCACCTGGCCGTGAATGACTTTGAACTGGCACGGGCT GCCAAGGCAGAGGCTTCCTCAGGAGACCATCCCACTGACACAGAGATGAAGGAGGAGCAGAAGAGCAACACGGCA GGGAGCCAGTCTCAGGTGGAGACAGAAGCA**TAG**CCCCTCTCCACCAGCCCTACTCCTGCGGCTGCCTGCCCCCCA GTCTCCCCACTCCACCCTGTTAGTTTTGTAAAAACTGAAGAATTTTGAGTGAATTAGACCTTTATTTTTCTATCT GGTTGGATGGTGGCTTTAGGGGAAGGGGGAAAGGTGTAGGCTGGGGGATTGAGGTGGGGAATCATTTTAGCTGGT TTTTGCTCCCTCTGTTAGGTCCATTTTCTAAGGGTAGAAGAGGCAAGTGGTAGGGATGAGGTCTGATAAGAACCC AGGGTGGAGAGGGAGACTCCTGGGCAGCCGTTTTCCTCATCCTTTCCCCAGTCCATTTCCAAATGTGGCC TCCATGTGGGTGCTAGGGACATGGGAAAAACCACTGCTATGCCATTTCTTCTCTGTTCCCTTCCTCACCCCCG ACGGTGTGGCTGATGTCTTCTGGTGTCATGGTGACCACCCCCTGTTCCCTGTTCTGGTATTTCCCCTGTCAG Α

165/2825 FIGURE 145

MTAEEMKATESGAQSAPLPMEGVDISPKQDEGVLKVIKREGTGTEMPMIGDRVFVHYTGWLLDGTKFDSSLDRKD KFSFDLGKGEVIKAWDIAIATMKVGEVCHITCKPEYAYGSAGSPPKIPPNATLVFEVELFEFKGEDLTEEEDGGI IRRIQTRGEGYAKPNEGAIVEVALEGYYKDKLFDQRELRFEIGEGENLDLPYGLERAIQRMEKGEHSIVYLKPSY AFGSVGKEKFQIPPNAELKYELHLKSFEKAKESWEMNSEEKLEQSTIVKERGTVYFKEGKYKQALLQYKKIVSWL EYESSFSNEEAQKAQALRLASHLNLAMCHLKLQAFSAAIESCNKALELDSNNEKGLFRRGEAHLAVNDFELARAD FQKVLQLYPNNKAAKTQLAVCQQRIRRQLAREKKLYANMFERLAEEENKAKAEASSGDHPTDTEMKEEQKSNTAG SQSQVETEA

166/2825 FIGURE 146A

AGGCAGCAGCAGAGGGAGAGCTCGGGGCTTGGAGGGGAAACAGCGGAAGACCTAAGATTATCGGGAGGGCAGCAG AGGCAGAGAACGAGGACAGGACCCTTGGCCGTCTTCTTCCAGGGAACGAGGGTCACAGCCTCGCTCTCCGCTTA TGCTTCTGGCGCCCCAGCTTAAAGCCGAGGCTGCGGCTGACAAAGGGCTCGCGCCGGTGCCGCCCCTTCTCAT CCGGGCATTCGGGTCCCTGCGAGAAGGAGGGGGAAGGACAGAGGGGGGAAGGAGCCGGAGGGGGCGCACACT TGGAGCTGAAGCCCTCTCCAGGGCTCCGGGCCGGTGCCCCAACGGACAGAGGTCGAGGAGGACCCGCAGAGGTGG CCAACCCTGCCGCCTCTGCGGGGGCATCGCTGGAGCCGCCGCAGCTCCGGCACCCGGAGAAGACAACCCCGCCG GGGCTGGGGGAGCGGCGGTGGCCGGGGCTGCAGGAGGGGCTCGGCGGTTCCTCTGCGGTGTGGAAGGATTTT TGTATGCCCCAAAAGATGACTACAAACATAGGATGTTTTTGGCGAGAGATGTATTCAGTGGAGGAAGCTGAGCAAC TTATGACTCTCATCTCTGCTGCACGAGAATATGAGATAGAGTTCATCTATGCGATCTCACCTGGATTGGATATCA CTTTTTCTAACCCCAAGGAAGTATCCACATTGAAACGTAAATTGGACCAGGTTTCTCAGTTTGGGTGCAGATCAT TTGCTTTGCTTTTTGATGATATAGACCATAATATGTGTGCAGCAGACAAAGAGGTATTCAGTTCTTTTGCTCATG ACTGTGGCACTTTCTGTTATCCAAATGTGTCTCAGTCTCCATATTTAAGGACTGTGGGTGAAAAGCTTCTACCTG GAATTGAAGTGCTTTGGACAGGTCCCAAAGTTGTTTCTAAAGAAATTCCAGTAGAGTCCATCGAAGAGGTTTCTA AGATTATTAAGAGAGCTCCAGTAATCTGGGATAACATTCATGCTAATGATTATGATCAGAAGAGACTGTTTCTGG GCCCGTACAAAGGAAGATCCACAGAACTCATCCCACGGTTAAAAGGAGTCCTCACTAATCCAAATTGTGAATTTG AAGCCAACTACGTTGCTATCCACACCCTTGCCACCTGGTACAAATCAAACATGAATGGAGTGAGAAAAGATGTAG TGATGACTGACAGTGAAGATAGTACTGTGTCCATCCAGATAAAATTAGAAAATGAAGGCAGTGATGAAGATATTG AAACTGATGTACTCTATAGTCCACAGATGGCTCTAAAGCTAGCATTAACAGAATGGTTGCAAGAGTTTGGTGTGC CTCATCAATACAGCAGTAGGCAAGTTGCACACAGTGGAGCTAAAGCAAGTGTAGTTGATGGGACTCCTTTAGTTG CAGCACCCTCTTTAAATGCCACAACCGTAGTAACAACAGTTTATCAGGAGCCCATTATGAGCCAGGGAGCAGCCT TGAGTGGTGAGCCTACTACTCTGACCAAGGAAGAAAAGAAACAGCCTGATGAAGAACCCATGGACATGGTGG TGGAAAAACAAGAAGAAACGGACCACAAGAATGACAATCAAATACTGAGTGAAATTGTTGAAGCGAAAATGGCAG AGGAATTGAAACCAATGGACACTGATAAAGAGAGCATAGCTGAATCAAAATCCCCAGAGATGTCCATGCAAGAAG ACGAGCATGGACCCAAAGGAGCACAGATGTTACGGGAATTTCAATGGCTTCGAGCAAATAGTAGTGTTGTCAGTG TCAATTGCAAAGGAAAAGACTCTGAAAAAATTGAAGAATGGCGGTCACGAGCAGCCAAGTTTGAAGAGATGTGTG GACTAGTGATGGGAATGTTCACTCGGCTCTCCAATTGTGCCAACAGGACAATTCTTTATGACATGTACTCCTATG TTTGGGATATCAAGAGTATAATGTCTATGGTGAAGTCTTTTGTACAGTGGTTAGGGTGTCGTAGTCATTCTTCAG CACAATTCTTAATTGGAGACCAAGAACCCTGGGCCTTTAGAGGTGGTCTAGCAGGAGAGTTCCAGCGTTTGCTGC CAATTGATGGGGCAAATGATCTCTTTTTCAGCCACCTCCACTGACTCCTACCTCCAAAGTTTATACTATCAGAC $\verb|CTTATTTCCTAAGGATGAGGCATCCGTGTACAAGATTTGCAGAGAAATGTATGACGATGGAGTGGGTTTACCCT|\\$ TTCAAAGTCAGCCTGATCTTATTGGAGACAAGTTAGTAGGAGGGCTGCTTTCCCTCAGCCTGGATTACTGCTTTG TCCTAGAAGATGAAGATGGCATATGTGGTTATGCCTTGGGCACTGTAGATGTGACCCCCTTTATTAAAAAATGTA AAATTTCCTGGATCCCCTTCATGCAGGAGAAGTATACCAAGCCAAATGGTGACAAGGAACTCTCTGAGGCTGAGA AAATAATGTTGAGTTTCCATGAAGAACAGGAAGTACTGCCAGAAACTTTCCTTGCTAATTTCCCTTCTCTGATAA AGATGGACATTCACAAAAAAGTAACTGACCCAAGTGTGGCCAAAAGCATGATGGCTTGCCTCCTGTCTTCACTGA AGGCTAATGGCTCCCGGGGAGCTTTCTGTGAAGTGAGACCAGATGATAAAAGAATTCTGGAATTTTACAGCAAGT ${\tt TAGGATGTTTTGAAATTGCAAAAATGGAAGGATTTCCAAAGGATGTGGTTATACTTGGTCGGAGCCTG{\tt TGACATT}$ TGTTGACACTGTGAACTGTCCAAAAGTCTCTTAACTGCACCTTGTGAATGGTAGTTGAGGTCTTCATACAGTTCA GCCTCTAGAATGGTAACAAATCAGCCAATTGGATTCGAAACAAAGAAGACTATGTAAAACTCACCCATCACACTT TGAGACTACTCACTGGTTGGAAGAATATAGTATTGCAGCAAATCCTGTATGAAAGAGAGATGTGGGCTTCCTTTT TGAGTCTTGTGTTAGGTGCTGAGACCTTTTACATGGGCTTATACAGGGAGAGAGTCTTCAATAAATGTAGTCAGC ACTATTTTCTGCATCCAGTGTGGTTTGCGTTTCTCACCTGAGAGTAATCAAGATAACATCTGTCATCTTGGT

167/2825 FIGURE 146B

 $\verb|TTATTCTGCTTTTTGTAAAGCCGTGGCCAATTGTCTCCTGTAATGACTGTTGGTTCAGGCATGTTGTACTTTGTA|$ GGGACAAATGTGCATTTGTTTGTGGCAAAAGCCTACAATTGACAAACTTGTAAATTTCTTTGTATATAAACTAGC TGTAACCTGACTATCCTTTGTGTTTTACTGTTTTTGTAAATTTTTTTCCTCTATAAATGAAAGGGTGTTGGTTCAG $\verb|AATGGCACTTTGAATAATGTAAACCAGTGAAAAGTGGATTTTCTTTACTTTTGTCTTTGGGTTTGGGGTTGTTTT|\\$ TGTTCTTTTGAAGTTTTATTATTTTTAAAGTGCCTCCCACCTAGGCCGTAGGCCATGACCATTTGGGGTACGAGA GCCTAATTTTGTAGGACTTAATCTGTTGAAAAGTGCAGTTACTTCTGGAAATTAACCTCAATATTAGGTCAGCAT GTGAAATGTTGGATTTGACATGTCAGGTAGGGTTCAGGGACTGATTGGTCCCATTTGCCCTCAGGTCAGTTGTTT AATCTCAAGACCTGTTACTACTGATTTTATTAAATCAGAGTCTTTAATTCTTGCATGTTTTGTATCTAATTTCTGA ACGAATGAGCACCTTTAACCAGTTATTTACAGTTACCTTTTTCCTTTAACCGGATTGTGAAAGCTTCATGTATT $\verb|TTAATTTAGATTCTGTGTTTTTAAGGGTTCTGAGCATGAAGCTGGCAGATAGTCGGCAGGACTCATTTTTCATC| \\$ $\tt ATGGCTGGCTGATTTCTCCATAGATTGATAACAGTATTTTGTTATCTTGCTTCTCTGTAGTTTTGCATCAGCTGT$ ACTAAATAGGTGAGAAGAAGGAGAGAGGTTTTTAGGTTAGAAACCTTTAACCGATAGAAGGATATGGTATGTT GTAAAGCTGGAACCAAGTTTGCATTTTTGAGGGCTTGAGATGAAGGGAAGACTCTTACCAGATAGTAAGACAGCT $\tt CTCATGGAATTCAGGATTTTTTAGCAAGTTTGCTTTTGGTTTTATCTTGGCTTTTAGTAATCATGTTGGCTGGTC$ TGGTCACAGGTGACTGTGAAACAGATGCCCCTGGTCTTGCTTTCATCACTCTAGGATCATGAAGTGCTATGCTAT ACGAACTGTAAAAGACCATGCAAGAGGCAAAATAAAACTTGAAGTGG

168/2825 FIGURE 147

MVQKESQATLEERESELSSNPAASAGASLEPPAAPAPGEDNPAGAGGAAVAGAAGGARRFLCGVVEGFYGRPWVM
EQRKELFRRLQKWELNTYLYAPKDDYKHRMFWREMYSVEEAEQLMTLISAAREYEIEFIYAISPGLDITFSNPKE
VSTLKRKLDQVSQFGCRSFALLFDDIDHNMCAADKEVFSSFAHAQVSITNEIYQYLGEPETFLFCPTEYCGTFCY
PNVSQSPYLRTVGEKLLPGIEVLWTGPKVVSKEIPVESIEEVSKIIKRAPVIWDNIHANDYDQKRLFLGPYKGRS
TELIPRLKGVLTNPNCEFEANYVAIHTLATWYKSNMNGVRKDVVMTDSEDSTVSIQIKLENEGSDEDIETDVLYS
PQMALKLALTEWLQEFGVPHQYSSRQVAHSGAKASVVDGTPLVAAPSLNATTVVTTVYQEPIMSQGAALSGEPTT
LTKEEEKKQPDEEPMDMVVEKQEETDHKNDNQILSEIVEAKMAEELKPMDTDKESIAESKSPEMSMQEDCISDIA
PMQTDEQTNKEQFVPGPNEKPLYTAEPVTLEDLQLLADLFYLPYEHGPKGAQMLREFQWLRANSSVVSVNCKGKD
SEKIEEWRSRAAKFEEMCGLVMGMFTRLSNCANRTILYDMYSYVWDIKSIMSMVKSFVQWLGCRSHSSAQFLIGD
QEPWAFRGGLAGEFQRLLPIDGANDLFFQPPPLTPTSKVYTIRPYFPKDEASVYKICREMYDDGVGLPFQSQPDL
IGDKLVGGLLSLSLDYCFVLEDEDGICGYALGTVDVTPFIKKCKISWIPFMQEKYTKPNGDKELSEAEKIMLSFH
EEQEVLPETFLANFPSLIKMDIHKKVTDPSVAKSMMACLLSSLKANGSRGAFCEVRPDDKRILEFYSKLGCFEIA
KMEGFPKDVVILGRSL

169/2825 FIGURE 148

TTCCGGTTCCCAGAGTGGGGCACAGCGAGGCGCTAGGGGGAACGCTGGCCTCTGAAACTAGCTCTGGGACCGGG TCTGCGGCCGGCCCCTAGCTGGCCCCGTCTCCCATCCCCAGAAGGGTATTCACTGGGGATTCTGAGCTTTGGCTA CTCCAGTTTCCCACGACACGATGTTCCCTTTCTACAGCTGCTGGAGGACTGGACTGCTACTACTACTCCTGGCTG TGGCAGTGAGAAATCCTGGCAGACAGAAGAAAAAACTTGCGACTTGGTAGGAGAAAAGGGTAAAGAGTCAGAGA AAGAGTTGGCTCTAGTGAAGAGGCTGAAACCACTGTTTAATAAAAGCTTTTGAGAGCACTGTGGGCCAGGGTTCAG ACACATACATCTACATCTTCAGGGTGTGCCGGGAAGCTGGCAACCACACTTCTGGGGCAGGCCTGGTGCAAATCA ACAAAAGTAATGGGAAGGAGACAGTGGTAGGGAGACTCAACGAGACTCACATCTTCAACGGAAGTAATTGGATCA TGCTGATCTATAAAGGGGGTGATGAATATGACAACCACTGTGGCAAGGAGCAGCGTCGTGCAGTGGTGATGATCT CCTGCAATCGACACCCTAGCGGACAATTTTAACCCTGTGTCTGAGGAGCGTGGCAAAGTCCAAGATTGTTTCT ACCTCTTTGAGATGGATAGCAGCCTGGCCTGTTCACCAGAGATCTCCCACCTCAGTGTGGGTTCCATCTTACTTG GAATGGAGCAGTTTCCCCACTTAGCCTTCTGGCAGGATCTTGGCAACCTGGTAGCAGATGGCTGTGACTTTGTCT GCCGTTCTAAACCTCGAAATGTGCCTGCAGCATATCGTGGTGTGGGGGATGACCAGCTGGGGGGAGGAGTCAGAAG $\mathtt{AAAGGGATGACCATTTATTACCAATG}$ \mathtt{TAG} $\mathtt{ATTGCACTTTATATGTCCAGCCTCTTCCTCAGTCCCCAAACCAAA$ GCTACACAGCCAGATTTCTCAAGCAGTCTCAACTCCAGTCCCTCATCTCACCCTTACTATTGCTCTTGCTTTTCCA GTTTGCTTTTGATTTTGCATCTTCTCACTAGTAAAACTGCCTTCCCTTTGTTCCTTATTTTCTGTTTTTTCTCTAG AGAGGTACAGTTGTAAGTCAGAGTTAATATAATAGGGCCTGTGAAAACAGAGGCTTTTGCATTGTCTCTTGACAT $\tt TTTCATGTTGTTATTCTGTACCCTATAGTAGCCTCCATGAGAATCTGGTATTTCTTGCTGCTTGGAACTACTTTG$ CAGTGATTACTTGGTTGCAGTCCAAGTACTCTCGTTTAGTCTGAGCCTGGAGATGTTCTAGACTTGCTTCTCCCA $\verb|CCTCTGAGATTAGGACAGGAAAAATGTGAAATTTCCCAATTACAGGATTATACGGTACCATCACATCATTTGTGGACATCACATCATTTGTGGACATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATCATCATTTGTGGACATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATCATCATTTGTGGACATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGGATTACAGATTACAGGATTACAGATTACAGGATTACAGATTACAGGATTACAGATTACAGGATTACAGATTA$ ${\tt AAATTGGGGTGACTGTATAGCTGGGATTGGGCTAAGGACTGTGGTCTTATCTGTCCACATACAGCCAAAATGCCT}$ ATCCAGAAATCCAGTTCGTTGGAAAGGAAAATTGGTACTCCTGTGCCACAGGGGTTCCAGAAAAGGGAAGTCACT TTACCTTGCGGTGGTGGGATCCTGATGTCTTTCATCCATTTGTAGTAAAAGCTGGTAAAGCTTTTCTTACTCCTG $\tt GTTCCCTACCAGTATTTCTAAACATGTCGCACTTTCTCCACAGGCATGTGGTTTTTGACCTTTTTTCAATCTTCT$ AGAAAGGGAACGGAAGCAGAAGTGGGACATCGAGGGCTCTGCTGTCCTCTGCGCTGGGTGTGGAATGCTGCTGCA $\verb|CCTGTCCCTTCTGCTGGGGAAGTGTCTTCTTGCCCACATTTCTGTGGGGAAAGGTTTTTAATCCTCTGAT| \\$

170/2825 FIGURE 149

MFPFYSCWRTGLLLLLAVAVRESWQTEEKTCDLVGEKGKESEKELALVKRLKPLFNKSFESTVGQGSDTYIYIF RVCREAGNHTSGAGLVQINKSNGKETVVGRLNETHIFNGSNWIMLIYKGGDEYDNHCGKEQRRAVVMISCNRHTL ADNFNPVSEERGKVQDCFYLFEMDSSLACSPEISHLSVGSILLVTFASLVAVYVVGGFLYQRLVVGAKGMEQFPH LAFWQDLGNLVADGCDFVCRSKPRNVPAAYRGVGDDQLGEESEERDDHLLPM

171/2825 FIGURE 150

CTGAGGCCCAGCCCCTTCGCCCGTTTCCATCACGAGTGCCGCCAGCATGTCTGACAAACTGCCCTACAAAGTCG $\verb|CCGACATCGGCCTGGCTGCCTGGGGACGCAAGGCCCTGGACATTGCTGAGAACGAGATGCCGGGCCTGATGCGTA|\\$ CGGCCGTCCTCATTGAGACCCTCGTCACCCTGGGTGCTGAGGTGCAGTGGTCCAGCTGCAACATCTTCTCCACCC AGGACCATGCGGCGCTGCCATGCCAAGGCTGGCATTCCGGTGTATGCCTGGAAGGGCGAAACGGACGAGGAGT ACCTGTGGTGCATTGAGCAGACCCTGTACTTCAAGGACGGGCCCCTCAACATGATTCTGGACGACGGGGGCGACC TCACCAACCTCATCCACACCAAGTACCCGCAGCTTCTGCCAGGCATCCGAGGCATCTCTGAGGAGACCACGACTG CCAAGAGCAAGTTTGACAACCTCTATGGCTGCCGGGAGTCCCTCATAGATGGCATCAAGCGGGCCACAGATGTGA TGATTGCCGGCAAGGTAGCGGTGGTAGCAGGCTATGGTGATGTGGGCAAGGGCTGTGCCCAGGCCCTGCGGGGTT TCGGAGCCCGCGTCATCATCACCGAGATTGACCCCATCAACGCACTGCAGGCTGCCATGGAGGGCTATGAGGTGA $\tt CCACCATGGATGAGGCCTGTCAGGAGGGCAACATCTTTGTCACCACCACAGGCTGTATTGACATCATCCTTGGCC$ GGCACTTTGAGCAGATGAAGGATGATGCCATTGTGTGTAACATTGGACACTTTGACGTGGAGATCGATGTCAAGT GGCTCAACGAGAACGCCGTGGAGAAGGTGAACATCAAGCCGCAGGTGGACCGGTATCGGTTGAAGAATGGGCGCC GCATCATCCTGCTGGCCGAGGGTCGGCTGGTCAACCTGGGTTGTGCCATGGGCCACCCCAGCTTCGTGATGAGTA ACTCCTTCACCAACCAGGTGATGGCGCAGATCGAGCTGTGGACCCATCCAGACAAGTACCCCGTTGGGGTTCATT TCCTGCCCAAGAAGCTGGATGAGGCAGTGGCTGAAGCCCACCTGGGCAAGCTGAATGTGAAGTTGACCAAGCTAA CTGAGAAGCAAGCCCAGTACCTGGGCATGTCCTGTGATGGCCCCTTCAAGCCGGATCACTACCGCTAC**TGA**GAGC CAGGTCTGCGTTTCACCCTCCAGCTGCTGTCCTTGCCCAGGCCCCACCTCTCCTCCCTAAGAGCTAATGGCACCA $\verb|CCGTCATACTGTTCCAAATGTGGCAGCGGGAACAGAGTACCCTCTTCAAGCCCCGGTCATGATGGAGGTCCCAGC| \\$ GGAGTCACAAAGCCCATGTGTTTTGCCATCTAGGCCTTCACCTGGTCTGTGGACTTATACCTGTGTGTTTT ACAGGTCCAGTGGTTCTTCAGCCCATGACAGATGAGAAGGGGCTATATTGAAGGGCAAAGAGGAACTGTTGTTTG AATTTTCCTGAGAGCCTGGCTTAGTGCTGGGCCTTCTCTTAAACCTCATTACAATGAGGTTAGTACTTTTAGTCC AGGGGCCAGAAAAACATGAATGCAGGCAGATTTCGTGAAATCTGCCACCACTTTATAACCAGATGGTTCCTTTCA TGGTGCCTGG

172/2825 FIGURE 151

MSDKLPYKVADIGLAAWGRKALDIAENEMPGLMRMRERYSASKPLKGARIAGCLHMTVETAVLIETLVTLGAEVQ WSSCNIFSTQDHAAAAIAKAGIPVYAWKGETDEEYLWCIEQTLYFKDGPLNMILDDGGDLTNLIHTKYPQLLPGI RGISEETTTGVHNLYKMMANGILKVPAINVNDSVTKSKFDNLYGCRESLIDGIKRATDVMIAGKVAVVAGYGDVG KGCAQALRGFGARVIITEIDPINALQAAMEGYEVTTMDEACQEGNIFVTTTGCIDIILGRHFEQMKDDAIVCNIG HFDVEIDVKWLNENAVEKVNIKPQVDRYRLKNGRRIILLAEGRLVNLGCAMGHPSFVMSNSFTNQVMAQIELWTH PDKYPVGVHFLPKKLDEAVAEAHLGKLNVKLTKLTEKQAQYLGMSCDGPFKPDHYRY

173/2825 FIGURE 152

ATACACGTGCCATGTGCAGCATGAGGGGCTACCCGAGCCCGTCACCCTGAGATGGAAGCCGGCTTCCCAGCCCAC CATCCCCATCGTGGGCATCATTGCTGGCCTGGTTCTCCTTGGATCTGTGGTCTCTGGAGCTGTGGTTGCTGCTGT GATATGGAGGAAGAGCTCAGGTGGAAAAGGAGGGGGCTACTCTAAGGCTGAGTGGAGCGACAGTGCCCAGGG GTCTGAGTCTCACAGCTTGTAAAGCCTGAGACAGCTGCCTTGTGTGCGACTGAGATGCACAGCTGCCTTGTGTGC GACTGAGATGCAGGATTTCCTCACGCCTCCCCTATGTGTCTTAGGGGGACTCTGGCTTCTCTTTTTGCAAGGGCCT $\verb|CTGAATCTGTCTGTGTCCCTGTTAGCACAATGTGAGGAGGTAGAGAAACAGTCCACCTCTGTGTCTACCATGACC| \\$ CCCTTCCTCACACTGACCTGTGTTCCTTCCCTGTTCTCTTTTCTATTAAAAATAAGAACCTGGGCAGAGTGCGGC AGCTCATGCCTGTAATCCCAGCACTTAGGGAGGCCGAGGAGGGCAGATCACGAGGTCAGGAGATCGAAACCATCC TCCCAGCTACTCAGGAGGCGGAGGCAGGAGAATGGCGTCAACCCGGGAGGCGGAGGTTGCAGTGAGCCAGGATTG CCTGGATCTCAATTTAATTTTTCATATTCTTGCAATGAAATGGACTTGAGGAAGCTAAGATCATAGCTAGAAATA CAGATAATTCCACAGCACATCTCTAGCAAATTTAGCCTATTCCTATTCTCTAGCCTATTCCTTACCACCTGTAAT $\verb|CTTGACCATATACCTTGGAGTTGAATATTGTTTTCATACTGCTGTGGTTTGAATGTTCCCTCCAACACTCATGTT| \\$ GAGACTTAATCCCTAATGTGGCAATACTGAAAGGTGGGGCCTTTGAGATGTGATTGGATCGTAAGGCTGTGCCTT CATTCATGGGTTAATGGGTTATCACAGGAATGGGACTGGTGGCTTTATAAGAAGAGAAAAGAGAAAC TGAGCTAGCATGCCCAACCCACAGAGAGCCTCCACTAGAGTGATGCTAAGTGGAAATGTGAGGTGCAGCTGCCAC ${\tt AGAGGGCCCCACCAGGGAAATGTCTAGTGTCTAGTGGATCCAGGCCACAGGAGAGAGTGCCTTGTGGAGCGCTG}$ GGAGCAGGACCTGACCACCACCAGGACCCCAGAACTGTGGAGTCAGTGGCAGCATGCAGCGCCCCCTTGGGAAAG CTTTAGGCACCAGCCTGCAACCCATTCGAGCAGCCACGTAGGCTCGACCCAGCAAAGCCACAGGCACGGGGCTAC $\tt CTGAGGCCTTGGGGGCCAATCCCTGCTCCAGTGTGTCCGTGAGGCAGCACACGAAGTCAAAAGAGATTATCTCTT$ CCCACAGATACCTTTTCTCCCCATGACCCTTTAACAGCATCTGCTTCATTCCCCTCACCTTCCCAGGCTGATCT GAGGTAAACTTTGAAGTAAAATAAAAGCTGTGTTTTGAGCATC

174/2825 FIGURE 153

CACTCCTTGAAGTATTTCCACACTTCCGTGTCCCGGCCCGGCCGCGGGGAGCCCCGCTTCATCTCTGTGGGCTAC GTGGACGACACCCAGTTCGTGCGCTTCGACAACGACGCCGCGAGTCCGAGGATGGTGCCGCGGGCCGCGGGATG CTGCGGACGCTGCGGCTACTACAATCAGAGCGAGGCCGGGTCTCACACCCTGCAGTGGATGCATGGCTGCGAG CTGGGGCCCGACAGGCGCTTCCTCCGCGGGTATGAACAGTTCGCCTACGACGGCAAGGATTATCTCACCCTGAAT GAGGACCTGCGCTCCTGGACCGCGGTGGACACGGCGGCTCAGATCTCCGAGCAAAAGTCAAATGATGCCTCTGAG GCGGAGCACCAGAGAGCCTACCTGGAAGACACATGCGTGGAGTGGCTCCACAAATACCTGGAGAAGGGGAAGGAG ACGCTGCTTCACCTGGAGCCCCCAAAGACACACGTGACTCACCACCCCATCTCTGACCATGAGGCCACCCTGAGG TGCTGGGCCCTGGGCTTCTACCCTGCGGAGATCACACTGACCTGGCAGCAGGATGGGGAGGGCCATACCCAGGAC ACGGAGCTCGTGGAGACCAGGCCTGCAGGGGATGGAACCTTCCAGAAGTGGGCAGCTGTGGTGGTGCCTTCTGGA GAGGAGCAGAGATACACGTGCCATGTGCAGCATGAGGGGCCTACCCGAGCCCGTCACCCTGAGATGGAAGCCGGCT TCCCAGCCCACCATCCTGGGCATCATTGCTGGCCTGGTTCTCCTTGGATCTGTGGTCTCTGGAGCTGTG AGTGCCCAGGGGTCTGAGTCTCACAGCTTG**TAA**AGCCTGAGACAGCTGCCTTGTGTGCGACTGAGATGCACAGCT GCCTTGTGTGCGACTGAGATGCAGGATTTCCTCACGCCTCCCCTATGTGTCTTAGGGGGACTCTGGCTTCTTTT TGCAAGGGCCTCTGAATCTGTCTGTGTCCCTGTTAGCACAATGTGAGGAGGTAGAGAAACAGTCCACCTCTGTGT CAGAGTGCGGCAGCTCATGCCTGTAATCCCAGCACTTAGGGAGGCCGAGGAGGGCCAGATCACGAGGTCAGGAGAT CGAAACCATCCTGGCTAACACGGTGAAACCCCGTCTCTACTAAAAAATACAAAAAATTAGCTGGGCGCAGAGGCA CGGGCCTGTAGTCCCAGCTACTCAGGAGGCGGAGGCATGGAGAATGGCGTCAACCCGGGAGGCGGAGGTTGCAGT GAGCCAGGATTGTGCGACTGCACTCCAGCCTGGGTGACAGGGTGAAACGCCATCTCAAAAAATAAAAATTAAAAA ATAAAAAAAGAACC

175/2825 FIGURE 154

MVDGTLLLLSSEALALTQTWAGSHSLKYFHTSVSRPGRGEPRFISVGYVDDTQFVRFDNDAASPRMVPRAPWMEQ EGSEYWDRETRSARDTAQIFRVNLRTLRGYYNQSEAGSHTLQWMHGCELGPDRRFLRGYEQFAYDGKDYLTLNED LRSWTAVDTAAQISEQKSNDASEAEHQRAYLEDTCVEWLHKYLEKGKETLLHLEPPKTHVTHHPISDHEATLRCW ALGFYPAEITLTWQQDGEGHTQDTELVETRPAGDGTFQKWAAVVVPSGEEQRYTCHVQHEGLPEPVTLRWKPASQ PTIPIVGIIAGLVLLGSVVSGAVVAAVIWRKKSSGGKGGSYSKAEWSDSAQGSESHSL

FIGURE 155

CCTCTCGGAGCTGGAAATGCAGCTATTGAGATCTTCGAATGCTGCGGAGCTGGAGGCGGAGGCAGCTGGGGAGGT $\verb|TTAGTCTAAAGAAAGAAAGAAAGTAGTCGTCCGCCCCTCACGCCCTCTCTTCCTCAGCCTTCCGCCCGGT|\\$ GAGGAAGCCCGGGGTGGCTCCCCCGTCGGGGCCGCCGCGCGCCCAGCGCCCCCGGGCCCCCCGCACG CCGCCCCATGCATCCCTTCTACACCCGGGCCGCCACCATGATAGGCGAGATCGCCGCCGCCGTGTCCTTCATCT $\verb|CCAAGTTTCTCCGCACCAAGGGGCTGACGAGCGAGCGACCAGCTGCAGACCTTCAGCCAGAGCCTGCAGGAGCTGC|\\$ TGGCAGAACATTATAAACATCACTGGTTCCCAGAAAAGCCATGCAAGGGATCGGGTTACCGTTGTATTCGCATCA ACCATAAAATGGATCCTCTGATTGGACAGCAGCAGCAGCTGGACTGAGCAGTCAGGAGCTGTTCAGGCTTC ${\tt TCCCAAGTGAACTCACACTCTGGGTTGACCCCTATGAAGTGTCCTACAGAATTGGAGAGGATGGCTCCATCTGTG}$ TGCTGTATGAAGCCTCACCAGCAGGAGGTAGCACTCAAAACAGCACCAACGTGCAAATGGTAGACAGCCGAATCA GCTGTAAGGAGGAACTTCTCTTGGGCAGAACGAGCCCTTCCAAAAACTACAATATGATGACTGTATCAGGT**TAA**G TTTAAGTGACAGTGCCATAGTTTGGACAGTACCTTTCAATGATTAATTTTAATAGCCTGTGAGTCCAAGTAAATG ATCCTTTTAAAGAAAATCTGTATTTCAAAGAATCTTTCTCTGCAGTAAATCTCGCAGGGGAATTTGCACTATTAC ACTTGAAAGTTGTTAATCCTTTTCGGCAGCTTTTAATAGGAAAGTTAAACGTTTTAAACATGGTAGTACT GGAAATTTTACAAGACTTTTACCTAGCACTTAAATATGTATAAATGTACATAAAGACAAACTAGTAAGCATGACC TGGGGAAATGGTCAGACCTTGTATTGTGTTTTTTGGCCTTGAAAGTAGCAAGTGACCAGAATCTGCCATGGCAACA ACTTAATTGGGTAAAAGTCTTTTCCACAAACCACCATCTATTTTGTGAACTTTGTTAGTCATCTTTTATTTGGTA GATGAGAAATTTTTCTTCTCTCTATAATAAATCGTTTCTTATCTTGGCATTTTTAACC

177/2825 FIGURE 156

MHPFYTRAATMIGEIAAAVSFISKFLRTKGLTSERQLQTFSQSLQELLAEHYKHHWFPEKPCKGSGYRCIRINHK MDPLIGQAAQRIGLSSQELFRLLPSELTLWVDPYEVSYRIGEDGSICVLYEASPAGGSTQNSTNVQMVDSRISCK EELLLGRTSPSKNYNMMTVSG

178/2825 FIGURE 157

GGCACGAGGACCGCATTGCGGCTTGGTTTTCTCACCCAGTGCATGTGGCAGGAGCGGTGAGATCACTGCCT CACGGCGATCCTGGACTGACGGTCACGACTGCCTACCCTCTAACCCTGTTCTGAGCTGCCCCTTGCCCACACACC CCAAACCTGTGTGCAGGATCCGCCTCCATGGAGCTACAGCCTCCTGAAGCCTCGATCGCCGTCGTGTCGATTCCG $\tt CGCCAGTTGCCTGGCTCACATTCGGAGGCTGGTGTCCAGGGGTCTCAGCGCGGGGGACGACTCAGAGTTGGGGTCT$ ATGATAGAGACGGGGTCTGACTGTGTTACCCAGGCTGGTCTTCAACTCTTGGCCTCAAGTGATCCTCCTGCCTTA GAGTTAGAGCCCGAGAAGCAGCCGATGAACGCGGCGTCTGGGGGCGGCCATGTCCCTGGCGGGAGCCGAGAAGAAT GGTCTGGTGAAGATCAAGGTGGCGGAAGACGAGGCGGAGGCGGCAGCCGCGCTAAGTTCACGGGCCTGTCCAAG GAGGAGCTGCTGAAGGTGGCAGCCCCGGCTGGGTACGCACCCGCTGGGCACTGCTGCTCTTCTGGCTC GGCTGGCTCGGCATGCTTGCTGGTGCCGTGGTCATAATCGTGCGAGCCCCCGTTGTCGCGAGCTACCGGCGCAG GCGGGTCTGAAGGGGCGTCTCGATTACCTGAGCTCTCTGAAGGTGAAGGGCCTTGTGCTGGGTCCAATTCACAAG AACCAGAAGGATGATGTCGCTCAGACTGACTTGCTGCAGATCGACCCCAATTTTTGGCTCCAAGGAAGATTTTGAC AGTCTCTTGCAATCGGCTAAAAAAAAGAGCATCCGTGTCATTCTGGACCTTACTCCCAACTACCGGGGTGAGAAC TCGTGGTTCTCCACTCAGGTTGACACTGTGGCCACCAAGGTGAAGGATGCTCTGGAGTTTTGGCTGCAAGCTGGC GTGGATGGGTTCCAGGTTCGGGACATAGAGAATCTGAAGGATGCATCCTCATTCTTGGCTGAGTGGCAAAATATC ACCAAGGGCTTCAGTGAAGACAGGCTCTTGATTGCGGGGGACTAACTCCTCCGACCTTCAGCAGATCCTGAGCCTA CTCGAATCCAACAAGACTTGCTGTTGACTAGCTCATACCTGTCTGATTCTGGTTCTACTGGGGAGCATACAAAA TCCCTAGTCACACAGTATTTGAATGCCACTGGCAATCGCTGGTGCAGCTTGGAGTTTGTCTCAGGCAAGGCTCCTG ACTTCCTTCTTGCCGGCTCAACTTCTCCGACTCTACCAGCTGATGCTCTTCACCCTGCCAGGGACCCCTGTTTTC AGCTACGGGGATGAGATTGGCCTGGATGCAGCTGCCCTTCCTGGACAGCCTATGGAGGCTCCAGTCATGCTGTGG GATGAGTCCAGCTTCCCTGACATCCCAGGGGCTGTAAGTGCCAACATGACTGTGAAGGGCCAGAGTGAAGACCCT GGCTCCCTCCTTTCCTTGTTCCGGCGGCTGAGTGACCAGCGGAGTAAGGAGCGCTCCCTACTGCATGGGGACTTC CACGCGTTCTCCGCTGGGCCTGGACTCTTCTCCTATATCCGCCACTGGGACCAGAATGAGCGTTTTCTGGTAGTG $\tt CTTAACTTTGGGGATGTGGGCCTCTCGGCTGGACTGCAGGCCTCCGACCTGCCAGCCCAGCCTGCCAGCCCTGCCAGCCCTGCCAGCCTGCCAGCCTGCCAGCCTGCCAGCCTGCCAGCCTGCCAGCCTGCCAGCCTGCCAGCCTGCCAGCCTGCCAGCCTGCCAGCCCAGCCCTGCCAGCCCAGCCCTGCCAGCCCTGCCAGCCCTGCCAGCCCTGCCAGCCCTGCCAGCCCTGCCAGCCCTGCCAGCCCTGCCAGCCCTGCCAGCCCCAGCCCCAGCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCAGCCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCAGCCCCCAGCCCCCAGCCCCAGCCCCAGCCCCCAGCCCCCACACACACACACACAC$ AAGGCTGACCTCCTGCTCAGCACCCAGCCGGGCGTGAGGAGGGCTCCCCTCTTGAGCTGGAACGCCTGAAACTG GAGCCTCACGAAGGGCTGCTCCCCTTCCCCTACGCGGCC TGA CTTCAGCCTGACATGGACCCACTACCCTTCAAAAAAAAAAA

179/2825 FIGURE 158

MSQDTEVDMKEVELNELEPEKQPMNAASGAAMSLAGAEKNGLVKIKVAEDEAEAAAAAKFTGLSKEELLKVAGSP GWVRTRWALLLLFWLGWLGMLAGAVVIIVRAPRCRELPAQKWWHTGALYRIGDLQAFQGHGAGNLAGLKGRLDYL SSLKVKGLVLGPIHKNQKDDVAQTDLLQIDPNFGSKEDFDSLLQSAKKKSIRVILDLTPNYRGENSWFSTQVDTV ATKVKDALEFWLQAGVDGFQVRDIENLKDASSFLAEWQNITKGFSEDRLLIAGTNSSDLQQILSLLESNKDLLLT SSYLSDSGSTGEHTKSLVTQYLNATGNRWCSWSLSQARLLTSFLPAQLLRLYQLMLFTLPGTPVFSYGDEIGLDA AALPGQPMEAPVMLWDESSFPDIPGAVSANMTVKGQSEDPGSLLSLFRRLSDQRSKERSLLHGDFHAFSAGPGLF SYIRHWDQNERFLVVLNFGDVGLSAGLQASDLPASASLPAKADLLLSTQPGREEGSPLELERLKLEPHEGLLLRF PYAA

180/2825 FIGURE 159

GGCACGAGGCCCCGGTTCCGGCGCGGTTGAGGCCTTCGGTGGTGAACGAGTCTCCAGCACC ATG TCTGGTTTGTCTGGCCCACCAGCCGGCGCGCCCTTTTCCGTTAGCGTTGCTGCTTTTGTTCCTGCTCGGCCCCAGATTGGTCCT TGGCGCGTACGAGATCTCCGACCAGTCTGGGGGCGCTGGCGGCCTGCGCAGCCACCTCAAGATCACAGATTCTGC TGGCCATATTCTCTACTCCAAAGAGGATGCAACCAAGGGGAAATTTGCCTTTACCACTGAAGATTATGACATGTT TGAAGTGTTTTTGAGAGCAAGGGAACAGGGCGGATACCTGACCAACTCGTGATCCTAGACATGAAGCATGGAGT GGAGGCGAAAAATTACGAAGAGATTGCAAAAGTTGAGAAGCTCAAACCATTAGAGGTAGAGCTGCGACGCCTAGA GTCAACAACACTCGGGTCCTATACTTCAGCATCTTTTCAATGTTCTGTCTCATTGGACTAGCTACCTGGCAGGT TACCTCAGCCAGCAGAACATCGCTGGGACGTGCCTGGCCTAAGGCATCCTACCAACAGCACCATCAAGGCACGTT GGAGCTTTCTTGCCAGAACTGATCTCTTTTGGTGTGGGAGGACATGGGGTACCACCTACACCCAACAAGTCAATG AGGGACTTCTTTTAATTTGGTAGGATTTTGACTGGTTTTGCAACAATAGGTCTATTATTAGAGTCACCTATGAC TGTTTTCTTTCTCCCACTTGCTCAGCAGCTTGGGCTTCCATTCTAGTTCTTTTACCAAGATTTTTGTGTGA CCATGTTGACTTCATTTGGATTGCCCTCTTTCAATTTCCTTGTGAAAACACCCTTAACTTTCTCTTTACCCTTAG $\tt CTCATAAAAGTGAGCTTTGAACTGTAGATAACTCTTAAAGAAAATGTCATTTTAGACAATTAAAATATTTGTGCT$

181/2825 FIGURE 160

MSGLSGPPARRGPFPLALLLLFLLGPRLVLAISFHLPINSRKCLREEIHKDLLVTGAYEISDQSGGAGGLRSHLK ITDSAGHILYSKEDATKGKFAFTTEDYDMFEVCFESKGTGRIPDQLVILDMKHGVEAKNYEEIAKVEKLKPLEVE LRRLEDLSESIVNDFAYMKKREEEMRDTNESTNTRVLYFSIFSMFCLIGLATWQVFYLRRFFKAKKLIE

182/2825 FIGURE 161

TATCCGTGCCGCTGCTCGGCCTCCTCGGCCTGGCCGTCGCCGAGCCCGCCGTCTACTTCAAGGAGCAGTTTC TGGACGGAGACGGGTGGACTTCCCGCTGGATCGAATCCAAACACAAGTCAGATTTTGGCAAATTCGTTCTCAGTT CCGGCAAGTTCTACGGTGACGAGGAGAAAGATAAAGGTTTGCAGACAAGCCAGGATGCACGCTTTTATGCTCTGT CGGCCAGTTTCGAGCCTTTCAGCAACAAAGGCCAGACGCTGGTGGTGCAGTTCACGGTGAAACATGAGCAGAACA ACAACATCATGTTTGGTCCCGACATCTGTGGCCCCTGGCACCAAGAAGGTTCATGTCATCTTCAACTACAAGGGCA AGAACGTGCTGATCAACAAGGACATCCGTTGCAAGGATGATGAGTTTACACACCTGTACACACTGATTGTGCGGC CAGACAACACCTATGAGGTGAAGATTGACAACAGCCAGGTGGAGTCCGGCTCCTTGGAAGACGATTGGGACTTCC TGCCACCCAAGAAGATAAAGGATCCTGATGCTTCAAAACCGGAAGACTGGGATGAGCCGGGCCAAGATCGATGATC CCACAGACTCCAAGCCTGAGGACTGGGACAAGCCCGAGCATATCCCTGACCCTGATGCTAAGAAGCCCGAGGACT GGGATGAAGAGTGGACGGAGTGGGAACCCCCAGTGATTCAGAACCCTGAGTACAAGGGTGAGTGGAAGCCCC GGCAGATCGACAACCCAGATTACAAGGGCACTTGGATCCACCCAGAAATTGACAACCCCGAGTATTCTCCCGATC $\verb|CCAGTATCTATGCCTATGATAACTTTGGCGTGCTGGGCCTGGACCTCTGGCAGGTCAAGTCTGGCACCATCTTTG|$ ACAACTTCCTCATCACCAACGATGAGGCATACGCTGAGGAGTTTGGCAACGAGACGTGGGGCGTAACAAAGGCAG CAGAGAAACAATGAAGGACAAACAGGACGAGGAGCAGAGGCTTAAGGAGGAGGAAGAAGACAAGAAACGCAAAG AGGAGGAGGAGGACAAGGAGGATGATGAGGACAAAGATGAGGATGAGGAGGATGAGGAGGACAAGGAGGA $\texttt{AAGATGAGGAGGAGATGTCCCCGGCCAGGCCAAGGACGAGCTG} \underline{\textbf{TAG}} \texttt{AGAGGCCTGCCTCCAGGGCTGGACTGAG}$ GCCTGAGCGCTCCTGCCGCAGAGCTTGCCGCGCCAAATAATGTCTCTGTGAGAACTCGAGAACTTTCATTTTTTC GATCAACATCTTTTCTTGCCTCTGTGCCCCTTCTCTCATCTCTTAGCTCCCCTCCAACCTGGGGGGCAGTGGTGT TCTCCAACCCCCAGCACTGAGGAAGAACGGGGCTCTTCTCATTTCACCCCTTCCCTTTCTCCCCTGCCCCAGGA CTATTAAATTAAATTTTGTGTCTC

183/2825 FIGURE 162

MLLSVPLLLGLLGLAVAEPAVYFKEQFLDGDGWTSRWIESKHKSDFGKFVLSSGKFYGDEEKDKGLQTSQDARFY ALSASFEPFSNKGQTLVVQFTVKHEQNIDCGGGYVKLFPNSLDQTDMHGDSEYNIMFGPDICGPGTKKVHVIFNY KGKNVLINKDIRCKDDEFTHLYTLIVRPDNTYEVKIDNSQVESGSLEDDWDFLPPKKIKDPDASKPEDWDERAKI DDPTDSKPEDWDKPEHIPDPDAKKPEDWDEEMDGEWEPPVIQNPEYKGEWKPRQIDNPDYKGTWIHPEIDNPEYS PDPSIYAYDNFGVLGLDLWQVKSGTIFDNFLITNDEAYAEEFGNETWGVTKAAEKQMKDKQDEEQRLKEEEEDKK RKEEEEAEDKEDDEDKDEDEEDEEDKEEDEEEDVPGQAKDEL

FIGURE 163

GCCTTCCGGTGCGGGAGAAACTACTACTCCCATAATGCCCCGCGGTCCCGCGAGCTGCCAGTCTCGTCGCGAGAA GCAGCGGCCCGGGGCGACTGAGCGGACAAACGGAAGTGTAGGTTACGGTCTGAGACATCACCGCCAAGCTGGGCA TCGGGGAGATGGCCGAGACTGACCCCAAGACCGTGCAGGACCTCACCTCGGTGGTGCAGACACTCCTGCAGCAGA TGCAAGATAAATTTCAGACCATGTCTGACCAGATCATTGGGAGAATTGATGATATGAGTAGTCGCATTGATGATC TGGAAAAGAATATCGCGGACCTCATGACACAGGCTGGGGTGGAAGAACTGGAAAAGTGAAAACAAGATACCTGCCA CGCAAAAGAGTTGAAGGTTGCTAATAATTTATACTGGAATCTGGCATTTTTCCAAGCCAAGAGAAGATCGAATGG CTTTTTGCAGCTAACTACTATGTGTAGACAGGTTTTATATTATAAAGTATGCATTCTTATCACCTAGTATATAGT TAGTTTGTAGAGTGATTTCCCCCCAGTTTCTTGAACATGGTATCTTCACATCTTGGACCTTGGTCAGTTGTGCTA TTCATTATTAAACACTAAAACTTTGGCGGTTCTTGCATAACATTGTCAGATTTTTTAGTGTATTTCTGTGAAGTC ATAGTAAACCCTTCAATTATAGTTAGTCTTGGTGAAGTAAGATGTTTGTAGACTTTAGAGTCTTTAATTCTTGG CACAACGTGACTGTTGAGCTAACACCAAATAGTGTGTTGGCAATACTTTTCAAATGGCTGAAAACACCTAAAAAT TGTTCATTCAGAAATATCTGTCACTGCTCTGTTGCCAAAACTCAGAATAGAACTTAGACGTATGTCTGAGTCCCT GAGATCACATGCTAAAGTCGATGAAAAGTAACCACTGCCACTGTCTTGTGTCAGAACTTTTACAGTACAGAAAAT AACAGAATAGCCTTCTGTAATGAGGCGTTTGTTAGAGTTTTGCATGAGATTCTAATACTTCAGTAGGACCCTACC TACGTGGTTCATCTACAATGGTTACCATAAAAAATCTGGCAGGATTTTAAAACTCAATCAGTCTTTCCTTTGAGC TAGTGACTTGAAAAGAAAGAAGAGAAAGAAAAGAGACCATATTAAGTCCATGCCAGTTGCTTGGCTAGAATATGAT CAACGACTTGTAGTAGACTCAAGTTTTTAAAAAACACTATTTTACTTAAACTGTTTCTTATCTAAATTCTTGCAG AGTGTCAATGTTATCATTGATTATAGAAGACAGGGATAATACCTTTATCTCTGGCCACTCAAAAATGCAGTGCCA GGAGTGCTAAACCTAGAGGCCAATACTGATGACCTGGAAGGTGATCCATATGATTGTCACCACAAAGTGCTTTTA CACAAAAACTTGAAAATTTGAAAAACATGATTTTTTTAAGTTTCTCATCTCACCAGTCTTGGTGTTTATATTGCA AATCTATCAAAGTAAGAAATAATTTGTGCTGTATACAAATTACATGGGGAACATAAAGGAGTGAGATCCTTCTGT GATAAAATGAATTCACCACTCTGGTTACCCAACTACAGAACCTCCTTTGATCAGGCCAGTAGGTTGTGATGCAGG CTGGAGCCCCGAATGCCCCACACACTGCAGCATTGACCAGACCATCCGAAACCTGCGTCCCTGGTGATGTTC TCAAGCCTCGGAAGTGGCAAATGGAAATGATATGGCCGGTTGCGGTTGTAGGAGAGTTGTGACTTAGGCAGGAGT CGACCTCCTCAAGTAATGGAACGATTTCAAAGGCAGGCTGCCCTGACCAAAAATATCTGCCATGAATAAAGGTGC $\tt CTGAAATCCTGCT{\boldsymbol{ATG}} AAGCTTCCTTTGTGTCAAAAATCTGTTTTGGTTTTCAGATGGAAATCCAGAAATCACATT$ AGAGTATCAACTAAAACCTCTGGACGGATTAAGTACAAGTAGCCCAAGGCAAAGCAGGAGAGGGGGGTGTTGGGGG AGGTTGCCTGCTGGAAGGGGAAGCTGAGGAGCGGGAGGGGGCTTGCCAAGACTGGCATTGCAGGAGACTTGTCT ACATTCTGTGAACCTCATGAAGAATTAGCATATTAAAGACTCTGAAAGTAGAGCAGAGAACTCAGCTTTAACCT GCTCACCTGCTAGTTTTC

185/2825 FIGURE 164

 ${\tt MKLPLCQKSVWFSDGNAEITLEYQLKPLDGLSTSSPRQSRRGGVGGGCLLEGEAEEREEGLPRLALQETCLRCVPRTLAPGDAAGRKGLWSLGFRRHSVNLMKKLAYKDSESRAENSALTCSPASF}$

186/2825 FIGURE 165

GGCACGAGGGCGGAGGAGTGGCAGCGGCAAGGCAGCCCAGTTTCGCGAAGGCTGTCGGCGCGCCGCGCCCGCA GGCACCCGGCACGCGCTTCCCCGCAGGCACCCGGCACGCCTTCCCCGCCGCCACGATGCCCAAGAGGAAGGT CAGCTCCGCCGAAGGCGCCCCCAAGGAAGAGCCCAAGAGGAGATCGGCGCGGTTGTCAGCTAAACCTCCTGCAAA AGTGGAAGCGAAGCCGAAAAAGGCAGCAGCGAAGGATAAATCTTCAGACAAAAAAGTGCAAAAAAAGGGAAAAAG GGGAGCAAAGGGAAAACAGGCCGAAGTGGCTAACCAAGAAACTAAAGAAGACTTACCTGCGGAAAACGGGGAAAAC GTCTTATCAGTGGTCCCTGTCTCCCTTCTTGTACAATCCAGAGGAATATTTTTATCAACTATTTTGTAAATGCAA GTTTTTTAGTAGCTCTAGAAACATTTTTAAGAAGGAGGGAATCCCACCTCATCCCATTTTTTAAGTGTAAATGCT TTTTTTTAAGAGGTGAAATCATTTGCTGGTTGTTTATTTTTTGGTACAACCAGAAAATAGTGTGGGATATTGAAT TATGGGAGGCTCTGACTGTCTCGGGTGTCAGCTTAACATTCCACAGATGGGGGGTTAGTTTTTATATCCTATAAT ACAAAGCATATTAAATGGCAATATGGAGTCAGTCCTGCATTTAATGTCTTGAACATTTTAAATTACTTCTATTAC GCACTCTGTAACATCTTTGGTTGTGGTAGTCCTGTTTTCCTAATAACTTTGTTACTGTGCTGTGAAAGATTACAG ATTTGAACATGTAGTGTACGTGCTATTGAGTTGTGAACTGGTGGGCCGTATGTAACAGCTGACCAACGTGAAGAT AAAGAATTACAATACATGGCTTTTTAGAATTTCGTTACGTATGTTAAGATTTGTGTACAAATTGAAATGTCTGTA

187/2825 FIGURE 166

 ${\tt MPKRKVSSAEGAAKEEPKRRSARLSAKPPAKVEAKPKKAAAKDKSSDKKVQTKGKRGAKGKQAEVANQETKEDLPAENGETKTEESPASDEAGEKEAKSD}$

188/2825 FIGURE 167A

AGAGCGAGCAGGGGAGAGCCAGGTTTTAAGGGGAGGACCGGTGCGAGTGAGGCAGCCCCGAGGCTCTGCTC ATTTAGCCAAAGGAAGGAGGTCAGGGGAACGCTCTCCCCTTCCCAAAAAACAAAAACAAAAAACCCTTTT TCCGCAGGGCCGTGCGGGACCGCAACCTGCTCCGAGACGGCGTCCTGCAGAACCTGCTCACCATCGAGGAGC GCTACCTTCCGCAGTGCTCCTACTTCAAGTGCGTGCAGAAGGACATCCAACCCTACATGCGCAGAATGGTGGCCA CCTGGATGCTGGAGGTCTGTGAGGAACAGAAGTGCGAAGAAGAGGTCTTCCCTCTGGCCATGAATTACCTGGACC GTTTCTTGGCTGGGGTCCCGACTCCGAAGTCCCATCTGCAACTCCTGGGTGCTGTCTGCATGTTCCTGGCCTCCA AACTCAAAGAGACCAGCCGCTGACCGCGGAGAAGCTGTGCATTTACACCGACAACTCCATCAAGCCTCAGGAGC TGCTGGAGTGGGAACTGGTGGTGCTGGGGAAGTTGAAGTGGAACCTGGCAGCTGTCACTCCTCATGACTTCATTG AGCACATCTTGCGCAAGCTGCCCCAGCAGCGGGAGAAGCTGTCTCTGATCCGCAAGCATGCTCAGACCTTCATTG CTCTGTGTGCCACCGACTTTAAGTTTGCCATGTACCCACCGTCGATGATCGCAACTGGAAGTGTGGGAGCAGCCA $\tt CCAACAGACGTGGATTGTCTCAAAGCTTGCCAGGAGCAGATTGAGGCGGTGCTCCTCAATAGCCTGCAGCAGT$ ACCGTCAGGACCAACGTGACGGATCCAAGTCGGAGGATGAACTGGACCAGGCCACCCCTACAGACGTGCGGG CTTTTAGAAGTGAGAAAAAGGTCCTACGAAAACGGAATAATAAAAAGCATTTGGTGCCTATTTGAAGTACAGC ATAAGGGAATCCCTTGTATATGCGAACAGTTATTGTTTGATTATGTAAAAGTAATAGTAAAATGCTTACAGGAAA ATGAGCTAGCACATACACCCCCTTGTAGTATAATTTCAAGGAACTGTGTACGCCATTTATGGCATGATTAGATTG CAAAGCAATGAACTCAAGAAGGAATTGAAATAAGGAGGGACATGATGGGGAAGGAGTACAAAACAATCTCTCAAC ATGATTGAACCATTTGGGATGGAGAAGCACCTTTGCTCTCAGCCACCTGTTACTAAGTCAGGAGTGTAGTTGGAT ACCATATTGCTATCTAATGGGGAAATGTAGCTATGGGCCATAACCAAAACTCACATGAAACGGAGGCAGATGGAG ACCAAGGGTGGGATCCAGAATGGAGTCTTTTCTGTTATTGTATTTAAAAGGGTAATGTGGCCTTGGCATTTCTTC TTAGAAAAAACTAATTTTTGGTGCTGATTGGCATGTCTGGTTCACAGTTTAGCATTGTTATAAACCATTCCATT CTCTTCTCTTTTGCCCCCTCCCTTCCTGCCCCCAGTCTGGGTTACTCTTCGCTTCTGGTATCTGGCGTTCTTTGG TACACAGTTCTGGTGTTCCTACCAGGACTCAAGAGACACCCCTTCCTGCTGACATTCCCATCACAACATTCCTCA GACAAGCCTGTAAACTAAAATCTGTTACCATTCTGATGGCACAGAAGGATCTTAATTCCCATCTCTATACTTCTC TTGTAATTGACAGGTAATGAAGCTATTTGTTAAAATATTTGCCTTTTTAAGTAAAAAAGAAAAATCAGAACAGGG CTATTTGAAGAATTATTTTATACACAGATTCTGCCTTGTTTCATAGTATGAGGGTTGAAGACGGAAAACAATCTA TCATCCATCCTTATTCACGTTGACAGTACCTAGCTGTAATGTTTCACAGAGTGTGCTGCTATTTTATAAACATTT TTATAATATTATTTTACTGCTTAAATTCCAAGTCCTGAAGTAGATGGTTGAGATATGAGTTCTTCGTACTGGA TTTTTTTTTTTCCTCTGATCACATTCTTCAAAGACGGAGTATTCTTTACCTCAGGTTTACTGGACAAAATCAAT AACTACAAAAGGCAATGATTCACGCTTTTGTTTTCATAATACCTCACAACCGTACAGTTTCTGCTTGGGAGCCCA TTCGCATGAGGAATACAGAAGCAGTGTGAGCAGGGCTGACTCCCTCTCAGGTGGAAGGCAGGGCGGTCTCACTCC CAGGGACCTTTTTGGTCATGGAGGCCATCGGGCTCCCAGTTAGACCCTGGTATCCTCATCATGATGGAAAAAATA CGTAATTTGCACTTAGGTACCAGGTGTCAGGAAACAGACTAAAAAGAATTCCACCAGGCTGTTTGGAGATCCTCA TCTTGGAGCTTTTTCAAAAGCGGGGCTTCATCTGCAAAGGGCCCTTTCATCTTGAAGTTTTTCCCCTCCGTCTTT

189/2825 FIGURE 167B

 $\tt CCCCTCCCCTGGCATGGACACCTTGTGTTTAGGATCATCTCTGCAGGTTTCCTAGGTCTGAATCTGCGAGTAGAT$ AAGCCCAGGCCCTCTGCTGAGCGGTACTAAACGGTCGGGTTTTCAATCACACTGAATTGGCAGGATAAGAAAAAT AGGTCAGATAAGTATGGGATGATAGTTGAAGGGAGGTGAAGAGGCTGCTTCTCTACAGAGGTGAAATTCCAGATG AGTCAGTCTCTTGGGAAGTGTGTTTAGAAGGGTTCAGGACTTTGTGAGTTAGCATGACCCTAAAATTCTAGGGGA AGAGTTTTCTCAAGAGCCAGCTTTGCTCAGCACACTCTCCTGGGCCCCAAGGAGTCCCACGGAATGGGGAAAGTG ACAGTCTGTAACTTTCCACTCTTCCTGTAGTCCCGAGGCCCCTGGGTCCTTCTAGCTTTTCTCTTTCCCATCCTT GCTTAAACACAAGAAGGAATCCTGGATTTTGCCCTCTCCTTAGCTCTTAGTCTCTTTGGTAGGAGTTTTGTTCCA ${\tt ACTAAAGGGGTTCCAAATTATCCTGGTCTTTTTCTACCTTGTTGTGTTTTCTATCTCGTCTTTACTTCCATCTGTT}$ TGTTTTTTTCTCCATCAGTGGGGGCCGAGTTGTTCCCCCAGCCTGCCAAATTTTGATCCTTCCCCTCTTTTGGCC AAATCCTAGGGGGAAGAAATCCTAGTATGCCAAAAATATATGCTAAGCATAATTAAACTCCATGCGGGTCCATAA CAGCCAAGAAGCCTGCAGGAGAAAGCCAAGGGCAGTTCCCTCCGCAGAACACCCCATGCGTGCTGAGAGGCGAGC TCCTTGAAGAAGGGGCTGTTCTTCCAGGAGGCCTTATTTTGAACTGCCTCAGGACCCCACTGGAGAGCACAGCAT GCCTTACTACTGGGTCATCCTTGGTCTATGTGCTCTGTACTGGAGGCTCTGTTCTGCCTCTTATCAGCCAGGTCA GGGGCACACATGGCTTAAGTGACAAAGCCAGAGGAGAAGACAACCCTGACAGCATCACGCTGCATCCCATTGCTA GCAGGATTGGCAACTCTTCAGACGGAGCTGCGCTTCCCTGCAGTCTAGCACCTCTAGGGCCTCTCCAGACTGTGC CCTGGGAGCTCTGGGACTGAAAGGTTAAGAACATAAGGCAGGATCAGATGACTCTCTCCAAGAGGGCAGGGGAAT TTTCTCCATGGGCCACAGGGGACAGGGCTGGGAGAAGAATAGACTTGCACCTTATGTCATGTAAATAATTGA TTTTCTAGTTCAAGAAGATAATATTGGTAGTGTGGGAATTGGAGGTAGGAAGGGGAAGGTCTGAGTAAGCCAG TTGGCTTCTAAGCCAAAAGGATTCCTCTTTGTTTATCTCTGAGACAGTCCAACCTTGAGAATAGCTTTAAAAGGG AAATTAATGCTGAGATGATAAAGTCCCCTTAAGCCAACAAACCCTCTGTAGCTATAGAATGAGTGCAGGTTTCTA CAAGAGGATATTATTACTTCCTCATACCACATGGCTTTTGATGATTCTGGATTCTAAACAACCCAGAATGGTCA TCAGGTTTTGAGAAGCCATCAGCAAATGTGTACGTGCATGCTGTAGCTGCAGCCTGCATCCCTTCGCCTGCAGCC TACTTTGGGGAAATAAAGTGCCTTACTGACTGTAGCCATTACAGTATCCAATGTCTTTTGACAGGTGCCTGTCCT TGAAAAACAAAGTTTCTATTTTTATTTTTAATTGGTTTAGTTCTTAACTGCTGGCCAACTCTTACATCCCCAGCA CAAGTGTGATGCCATATCAAGTCCATGTTATTCTCTCACAGTGTACTCTATAAGAGGTGTGGGTGTCTGTTTGGT CAGGATGTTAGAAAGTGCTGATAAGTAGCATGATCAGTGTATGCGAAAAGGTTTTTAGGAAGTATGGCAAAAATG $\verb|TTGTATTGGCTATGATGGTGACATGATATAGTCAGCTGCCTTTTAAGAGGTCTTATCTGTTCAGTGTTAAGTGAT|$ TTAAAAAAATAATAACCTGTTTTCTGACTAGTTTAAAGATGGATTTGAAAATGGTTTTGAATGCAATTAGGTTAT GCTATTTGGACAATAAACTCACCTTGACCT

190/2825 FIGURE 168

 $\label{thm:chevdpvravrdrnl} $$ MELLCHEVDPVRRAVRDRNLLRDDRVLQNLLTIEERYLPQCSYFKCVQKDIQPYMRRMVATWMLEVCEEQKCEEE $$ VFPLAMNYLDRFLAGVPTPKSHLQLLGAVCMFLASKLKETSPLTAEKLCIYTDNSIKPQELLEWELVVLGKLKWN LAAVTPHDFIEHILRKLPQQREKLSLIRKHAQTFIALCATDFKFAMYPPSMIATGSVGAAICGLQQDEEVSSLTC DALTELLAKITNTDVDCLKACQEQIEAVLLNSLQQYRQDQRDGSKSEDELDQASTPTDVRDIDL$

FIGURE 169

GTGCATGCCGTGGGTCTGACGGCTTGAGTAGCGCTAGGGAGAATCCCTGCAGGTAATATTTGACTTTTGCTTCAT $\tt ATTAATCTGAGTGGAAAATAAAAGGGCCCTCTTCTCCTCTCGCTTCCCTGCCGGGCAGGCGCC{\color{red} \underline{ATC} \\ GCGGAAGCC} \\$ $\verb|TCGGCGACGGGCGCCTGCGGAGGGCGATGGCAGCGGCGGAAGGCTCCTCGGGCCCGGCGGGCTTGACTCTGGGC|$ CGGAGCTTCTCGAACTACCGGCCCTTCGAGCCCCAGGCGTTGGGCCTCAGCCCGAGCTGGCGGCTGACGGGCTTC TCCGGCATGAAGGGCTGAGGCTGCAAGGTCCCGCAGGAGGCGCTGCTCAAACTCCTGGCGGGACTGACGCGGCCG GACGTGCGGCCCCGCTGGGCCGGGGCCTGGTGGGTGGCCAGGAAGAGGCGTCCCAGGAAGCCGGCCTGCCGGCA GGAGCGGGCCCCAGCCCACCTTTCCAGCCCTGGGCATCGGGATGGACTCCTGCGTCATCCCCCTGAGGCACGGG GGCCTGTCACTGGTGCAGACCACGGACTTCTTTTACCCCTTGGTAGAAGATCCCTACATGATGGGGGCGCATAGCT TGTGCCAACGTGCTGAGTGACCTCTACGCCATGGGGATTACTGAGTGTGACAACATGTTGATGTTACTCAGCGTC AGCCAGAGTATGAGTGAGGAGGAACGCGAAAAGGTAACGCCACTCATGGTCAAAGGCTTTCGGGATGCGGCTGAG GAAGGAGGGACGCAGTGACCGGTGGCCAAACGGTGGTCAACCCTTGGATTATAATCGGTGGAGTTGCCACTGTA GTATGCCAACCAAATGAGTTCATAATGCCGGACAGCGCCGTCGTTGGGGACGTGCTGGTGTTAACCAAACCGTTA GGAACCCAGGTTGCTGTCAATGCCCACCAATGGCTGGATAATCCTGAAAGATGGAATAAAGTAAAGATGGTGGTC TTAATGCACACATTTAATGCCCATGCGGCCACAGATATCACAGGCTTTGGCATTCTAGGACACTCCCAGAACCTT GCAAAACAACAAAGAATGAAGTGTCCTTTGTTATTCATAATCTGCCCAATAATTGCCAAGATGGCTGCCGTCAGC AAGGCCAGTGGACGGTTTGGGCTTCTTCAAGGAACCTCAGCTGAAACCTCTGGGGGGATTACTGATTTGTCTGCCA AGAGAACAGGCGGCTCGCTTTTGTTCTGAAATCAAATCCTCCAAGTACGGAGAGGGTCACCAAGCGTGGATCGTT GGCATTGTGGAAAAGGGAAACCGAACGGCCCGGATCATTGACAAGCCGCGAGTTATTGAAGTCCTGCCTCGTGGG $\texttt{GCCACAGCTGCTGTTCTTGCTCCTGACAGTTCAAATGCCTCCTCTGAGCCTAGCTCG} \textbf{\textbf{TGA}} \textbf{GATGAAAGAACAGAA}$ GTTGTTTGGACCTTAGAGCCATTGTCCACAATCACGGATGGTTCTCAAGAGTTGATTGTAAGAAATTTCCAAAGA AGGCTGCCTGCATAGTGGTTCCGGCTGCCCTTTCTAGGTGATTGGAATCAGCCCATCTAAAGCAGTCTTTATATG CATTCCGAGGCCAGAGTAACATTTTGAACTTTGGGGGGGATATTTGTTCATCACTTGGGTAGAAGAGGAGCAAAAA CAAATGAGTTTTGGACCAATATTGTTGATAAATCTAAATTGTTAAGAGAGATCTTATAATGCAACATCAAATTCT TTATTCAATTTTACTGAAGTACTGGCTCTTTCCTGCTCTGGACAAGAATTGAGCAACTTGTCTGATGACTGGGAA AGGAGGACCTGCAACCATCTGACTTGGTCTCTGTTAATGACGTCTCTCCCTCTAAACCCCATTAAGGACTGGGAG AAA

192/2825 FIGURE 170

MAEASATGACGEAMAAAEGSSGPAGLTLGRSFSNYRPFEPQALGLSPSWRLTGFSGMKGXGCKVPQEALLKLLAG LTRPDVRPPLGRGLVGGQEEASQEAGLPAGAGPSPTFPALGIGMDSCVIPLRHGGLSLVQTTDFFYPLVEDPYMM GRIACANVLSDLYAMGITECDNMLMLLSVSQSMSEEEREKVTPLMVKGFRDAAEEGGTAVTGGQTVVNPWIIIGG VATVVCQPNEFIMPDSAVVGDVLVLTKPLGTQVAVNAHQWLDNPERWNKVKMVVSREEVELAYQEAMFNMATLNR TAAGLMHTFNAHAATDITGFGILGHSQNLAKQQRNEVSFVIHNLPIIAKMAAVSKASGRFGLLQGTSAETSGGLL ICLPREQAARFCSEIKSSKYGEGHQAWIVGIVEKGNRTARIIDKPRVIEVLPRGATAAVLAPDSSNASSEPSS

193/2825 FIGURE 171

 $\tt AAAAAAGGCCGTGCAGTTCCTAGCGAGGAGGCGCCGCCGCCATTGCCGCTCTCTCGGTGAGCGCAGCCCCGCTCT$ CCGGGCCGGGCCTTCGCGGGCCACCGGCGCCATGGGCCAGTGCGGCATCACCTCCTCCAAGACCGTGCTGGTCTTTCTCAACCTCATCTTCTGGGGGGCAGCTGGCATTTTATGCTATGTGGGAGCCTATGTCTTCATCACTTATGATGA $\tt CTATGACCACTTCTTTGAAGATGTGTACACGCTCATCCCTGCTGTAGTGATCATAGCTGTAGGAGCCCTGCTTTT$ ${\tt CATCATTGGGCTAATTGGCTGTGCCACAATCCGGGAAAGTCGCTGTGGACTTGCCACGTTTGTCATCCTC}$ GCTCTTGGTTTTTGTCACAGAAGTTGTTGTAGTGGTTTTTGGGATATGTTTACAGAGCAAAGGTGGAAAATGAGGT TGTACAGAGACAGCTGCATTGTTGTGGAATTCACAACTACTCAGACTGGGAAAATACAGATTGGTTCAAAGAAAC CAAAAACCAGAGTGTCCCTCTTAGCTGCTGCAGAGAGACTGCCAGCAATTGTAATGGCAGCCTGGCCCACCCTTC CGACCTCTATGCTGAGGGGTGTGAGGCTCTAGTTGTGAAGAAGCTACAAGAAATCATGATGCATGTGATCTGGGC CGCACTGGCATTTGCAGCTATTCAGCTGCTGGGCATGCTGTGTGCTTGCATCGTGTTGTGCAGAAGGAGTAGAGA ${\tt TCCTGCTTACGAGCTCCTCATCACTGGCGGAACCTATGCA}{\tt TAG}{\tt TTGACAACTCAAGCCTGAGCTTTTTGGTCTTG}$ TTCTGATTTGGAAGGTGAATTGAGCAGGTCTGCTGCTGTTGGCCTCTGGAGTTCATTTAGTTAAGGCACATGTAC TGTTCTAGCTGACTCTTCATGCCCCTAAGATTTTAAGTACGATGGTGAACGTTCTAATTTCAGAACCAATTGCGA GTCATGTAGTGTGGTAGAATTAAAGGAGGACACGAGCCTGCTTCTGTTACCTCCAAGTGGTAACAGGACTGATGC AACCAGCTTTCTGGTTAAGGTTAACACCAGATGGTGCCCCTCATTGGTGTCCTTTTAAAAAAATATTTACTGTAGT CCAATAAGATAGCAGCTGTACAAAATGACTAAAATAGATTGTAGGATCATATGGCGTATATCTTGGTTCATCTTC AAAATCAGAGACTGAGCTTTGAAACTAGTGGTTTTTTAATCAAAGTTGGCTTTATAGGAGGAGTATAATGTATGCA CTACTGTTTTAAAAGAATTAGTGTGAGTGTGTTTTTGTATGAATGAGCCCATTCATGGTAAGTCTTAAGCTTGTT GGAAATAATGTACCCATGTAGACTAGCAAAATAGTATGTAGATGTGATCTCAGTTGTAAATAGAAAAATCTAATT CAATAAACTCTGTATCAGCCCCC

194/2825 FIGURE 172

MGQCGITSSKTVLVFLNLIFWGAAGILCYVGAYVFITYDDYDHFFEDVYTLIPAVVIIAVGALLFIIGLIGCCAT IRESRCGLATFVIILLLVFVTEVVVVVLGYVYRAKVENEVDRSIQKVYKTYNGTNPDAASRAIDYVQRQLHCCGI HNYSDWENTDWFKETKNQSVPLSCCRETASNCNGSLAHPSDLYAEGCEALVVKKLQEIMMHVIWAALAFAAIQLL GMLCACIVLCRRSRDPAYELLITGGTYA

195/2825 FIGURE 173

GTTGCCAGGGAGCGGCGGGAGCCCTGAGGGGACTGCGGCGGCTGCGCGGAGGAGCGAGGCGCTTGCTGGGGTC GGGGCTGCGCGACGGCGCAGGGGCTGCGGGGAGCGCCGCGCAGGCCGTGCAGTTCCTAGCGAGGAGGCGCCGCCG $\verb|CCATTGCCGCTCTCTCGGTGAGCGCAGCCCCGCTCTCCGGGGCCGGGCCTTCGCGGGCCCACCGGCGCCATGGGCCACGGGCCCATGGGCCACGGGCCCATGGGCCCACGGGCCCATGGGCCCACGGGCCCACGGCGCCCATGGGCCCACGGGCCCACGGGCCCACGGCGCCCACGGCGCCCACGGCGCCCACGGGCCCACCGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACCGGGCCCACCGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCCACGGGCCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCACGGGCCCCACGGGCCCACGGGCCCCACGGCGCCCACGGCCCACGGCCCCGGCCCCACGGCCCCACGGCCCCACGGCCCCACGGCCCCACGGCCCCACGGCCCCA$ GTGCGCCATCACCTCCTCCAAGACCGTGCTGGTCTTTCTCAACCTCATCTTCTGGGGGGGCAGCTGGCATTTTATG CTATGTGGGAGCCTATGTCTTCATCACTTATGATGACTATGACCACTTCTTTGAAGATGTGTACACGCTCATCCC TGCTGTAGTGATCATAGCTGTAGGAGCCCTGCTTTTCATCATTGGGCTAATTGGCTGCTGTGCCACAATCCGGGA AAGTCGCTGTGGACTTGCCACGTTTGTCATCATCCTGCTCTTGGTTTTTTGTCACAGAAGTTGTTGTAGTGGTTTT GGGATATGTTTACAGAGCAAAGGTGGAAAATGAGGTTGATCGCAGCATTCAGAAAGTGTATAAGACCTACAATGG AACCAACCCTGATGCTGCTAGCCGGGCTATTGATTATGTACAGAGACAGCTGCATTGTTGTGGAATTCACAACTA CTCAGACTGGGAAAATACAGATTGGTTCAAAGAAACCAAAAACCAGAGTGTCCCTCTTAGCTGCTGCAGAGAGAC TGCCAGCAATTGTAATGGCAGCCTGGCCCACCCTTCCGACCTCTATGCTGAGGGGTGTGAGGCTCTAGTTGTGAA GAAGCTACAAGAAATCATGATGCATGTGATCTGGGCCGCACTGGCATTTGCAGCTATTCAGCTGCTGGGCATGCT GTGTGCTTGCATCGTGTTGTGCAGAAGGAGTAGAGATCCTGCTTACGAGCTCCTCATCACTGGCGGAACCTATGC ACCTACTTACCTACCTGCGACTTTCTTTTTCCTTGTTCTAGCTGACTCTTCATGCCCCTAAGATTTTAAGTA CGATGGTGAACGTTCTAATTTCAGAACCAATTGCGAGTCATGTAGTGTGGTAGAATTAAAGGAGGACACGAGCCT GCTTCTGTTACCTCCAAGTGGTAACAGGACTGATGCCGAAATGTCACCAGGTCCTTTCAGTCTTCACAGTGGAGA ACTCTTGGCCAAAGGTTTTTGGGGGGAGGAGGAGGAAACCAGCTTTCTGGTTAAGGTTAACACCAGATGGTGCCC CTCATTGGTGTCCTTTTAAAAAATATTTACTGTAGTCCAATAAGATAGCAGCTGTACAAAATGACTAAAATAGAT TGTAGGATCATATGGCGTATATCTTGGTTCATCTTCAAAATCAGAGACTGAGCTTTGAAACTAGTGGTTTTTAAT CAAAGTTGGCTTTATAGGAGGAGTATAATGTATGCACTACTGTTTTAAAAGAATTAGTGTGAGTGTTTTTTGTA TGAATGAGCCCATTCATGGTAAGTCTTAAGCTTGTTGGAAATAATGTACCCATGTAGACTAGCAAAATAGTATGT AGATGTGATCTCAGTTGTAAATAGAAAAATCTAATTCAATAAACTCTGTATCAGCCCCCAACATATTATTTTTCA

196/2825 FIGURE 174

MGQCGITSSKTVLVFLNLIFWGAAGILCYVGAYVFITYDDYDHFFEDVYTLIPAVVIIAVGALLFIIGLIGCCAT IRESRCGLATFVIILLLVFVTEVVVVVLGYVYRAKVENEVDRSIQKVYKTYNGTNPDAASRAIDYVQRQLHCCGI 'HNYSDWENTDWFKETKNQSVPLSCCRETASNCNGSLAHPSDLYAEGCEALVVKKLQEIMMHVIWAALAFAAIQLL GMLCACIVLCRRSRDPAYELLITGGTYA

197/2825 FIGURE 175

 $\texttt{CTGACTCTTGAGGCTCATTTTGCAGTTGTTGAAATTGTCCCCGCAGTTTTCAATC\textbf{ATG}} \texttt{TCTGAACCAATCAGAG}$ TCCTTGTGACTGGAGCAGCTGGTCAAATTGCATATTCACTGCTGTACAGTATTGGAAATGGATCTGTCTTTGGTA AAGATCAGCCTATAATTCTTGTGCTGTTGGATATCACCCCCATGATGGGTGTCCTGGACGGTGTCCTAATGGAAC TGCAAGACTGTGCCCTTCCCCTCTGAAAGATGTCATCGCAACAGATAAAGAAGACGTTGCCTTCAAAGACCTGG ATGTGGCCATTCTTGTGGGCTCCATGCCAAGAAGGGAAGGCATGGAGAAAAGATTTACTGAAAGCAAATGTGA AAATCTTCAAATCCCAGGGTGCAGCCTTAGATAAATACGCCAAGAAGTCAGTTAAGGTTATTGTTGTGGGTAATC CAGCCAATACCAACTGCCTGACTGCTTCCAAGTCAGCTCCATCCCCAAGGAAACTTCAGTTGCTTGACTC GTTTGGATCACACCGAGCTAAAGCTCAAATTGCTCTTAAACTTGGTGTGACTGCTAATGATGTAAAGAATGTCA TTATCTGGGGAAACCATTCCTCGACTCAGTATCCAGATGTCAACCATGCCAAGGTGAAATTGCAAGGAAAGGAAG TTGGTGTTTATGAAGCTCTGAAAGATGACAGCTGGCTCAAGGGAGAATTTGTCACGACTGTGCAGCAGCGTGGCG CTGCTGTCATCAAGGCTCGAAAACTATCCAGTGCCATGTCTGCTGCAAAAGCCATCTGTGACCACGTCAGGGACA TCTGGTTTGGAACCCCAGAGGGAGAGTTTGTGTCCATGGGTGTTATCTCTGATGGCAACTCCTATGGTGTTCCTG ATGATCTGCTCTACTCATTCCCTGTTGTAATCAAGAATAAGACCTGGAAGTTTGTTGAAGGTCTCCCTATTAATG CCTCTGCCTGA CTAGACAATGATGTTACTAAATGCTTCAAAGCTGAAGAATCTAAATGTCGTCTTTGACTCAAGTACCAAATAATAATAATGCTATACTTAAATTACTTGTGAAAAACAACACATTTTAAAGATTACGTGCTTCTTGGTA

198/2825 FIGURE 176

MSEPIRVLVTGAAGQIAYSLLYSIGNGSVFGKDQPIILVLLDITPMMGVLDGVLMELQDCALPLLKDVIATDKED VAFKDLDVAILVGSMPRREGMERKDLLKANVKIFKSQGAALDKYAKKSVKVIVVGNPANTNCLTASKSAPSIPKE NFSCLTRLDHNRAKAQIALKLGVTANDVKNVIIWGNHSSTQYPDVNHAKVKLQGKEVGVYEALKDDSWLKGEFVT TVQQRGAAVIKARKLSSAMSAAKAICDHVRDIWFGTPEGEFVSMGVISDGNSYGVPDDLLYSFPVVIKNKTWKFV EGLPINDFSREKMDLTAKELTEEKESAFEFLSSA

199/2825 FIGURE 177

GGCACGAGGAGAGGATCCTGGGCGCCGCCAGGTTCTGTGGACAATCACA**ATG**GGAATCCAAGGAGGGTCTGTCCT GTTCGGGCTGCTCGTCCTGGCTGTCTTCTGCCATTCAGGTCATAGCCTGCAGTGCTACAACTGTCCTAACCC AACTGCTGACTGCAAAACAGCCGTCAATTGTTCATCTGATTTTGATGCGTGTCTCATTACCAAAGCTGGGTTACA AGTGTATAACAAGTGTTGGAAGTTTGAGCATTGCAATTTCAACGACGTCACAACCCGCTTGAGGGAAAATGAGCT AACGTACTACTGCTGCAAGAAGGACCTGTGTAACTTTAACGAACAGCTTGAAAATGGTGGGACATCCTTATCAGA GAAAACAGTTCTTCTGCTGGTGACTCCATTTCTGGCAGCAGCCTGGAGCCTTCATCCC**TAA**GTCAACACCAGGAG AGCTTCTCCCAAACTCCCCGTTCCTGCGTAGTCCGCTTTCTCTTGCTGCCACATTCTAAAGGCTTGATATTTTCC AAATGGATCCTGTTGGGAAAGAATAAAATTAGCTTGAGCAACCTGGCTAAGATAGAGGGGCTCTGGGAAGACTTTG GATTGCATGCTTCCTCCTTTGCTCTTGGGAAGACCAGCTTTGCAGTGACAGCTTGAGTGGGTTCTCTGCAGCCCT CAGATTATTTTTCCTCTGGCTCCTTGGATGTAGTCAGTTAGCATCATTAGTACATCTTTGGAGGGTGGGGCAGGA GTATATGAGCATCCTCTCACATGGAACGCTTTCATAAACTTCAGGGATCCCGTGTTGCCATGGAGGCATGCCA AATGTTCCATATGTGGGTGTCAGTCAGGGACAACAAGATCCTTAATGCAGAGCTAGAGGACTTCTGGCAGGGAAG TGGGGAAGTGTTCCAGATAGCAGGGCATGAAAACTTAGAGAGGTACAAGTGGCTGAAAATCGAGTTTTTCCTCTG TCTTTAAATTTTATATGGGCTTTGTTATCTTCCACTGGAAAAGTGTAATAGCATACATCAATGGTGTTAAAGC TACTACATGTGACTGCCAGTATTAAGTGTGCTTATTTTAAATGTTACTGGTAGAAAGGCAGTTCAGGTATGTGTG TATATAGTATGAATGCAGTGGGGACACCCTTTGTGGTTACAGTTTGAGACTTCCAAAGGTCATCCTTAATAACAA CAGATCTGCAGGGGTATGTTTTACCATCTGCATCCAGCCTCCTGCTAACTCCTAGCTGACTCAGCATAGATTGTA TAAAATACCTTTGTAACGGCTCTTAGCACACTCACAGATGTTTGAGGCCTTTCAGAAGCTCTTCTAAAAAATGATA TAATGACATTTGTATTTTATGATCTTGGCTGTATTTAATGGCATAGGCTGACTTTTGCAGATGGAGGAATTTCTT ATGAAATATAACAAGTGGGTGAATGTGGTTATGGCCGAAAAGGATATGCAGTATGCTTAATGGTAGCAACTGAAA GAAGACATCCTGAGCAGTGCCAGCTTTCTTCTGTTGATGCCGTTCCCTGAACATAGGAAAATAGAAACTTGCTTA

200/2825 FIGURE 178

 ${\tt MGIQGGSVLFGLLLVLAVFCHSGHSLQCYNCPNPTADCKTAVNCSSDFDACLITKAGLQVYNKCWKFEHCNFNDV}\\ {\tt TTRLRENELTYYCCKKDLCNFNEQLENGGTSLSEKTVLLLVTPFLAAAWSLHP}$

FIGURE 179

TTATAGATTTCTTCAAGAGGAACGAGCATACGTATGTTCACTCGTCTGCCACCATCCCATTGGATGACCCCACTT TGCTCTTTGCCAATGCAGGCATGAACCAGTTTAAACCCATTTTCCTGAACACAATTGACCCATCTCACCCCATGG GCAAGGATGTCTATCATCACACCTTCTTCGAGATGCTGGGCTCTTGGTCTTTTGGAGATTACTTTAAGGAATTGG CATGTAAGATGGCTCTGGAACTCCTCACCCAAGAGTTTGGCATTCCCATTGAAAGACTTTATGTTACTTTG GCGGGGATGAAGCAGCTGGCTTAGAAGCAGATCTGGAATGCAAACAGATCTGGCAAAATTTGGGGCTGGATGACA CCAAAATCCTCCCAGGCAACATGAAGGATAACTTCTGGGAGATGGGTGACACGGGCCCCTGTGGTCCTTGCAGTG AGATCCACTACGACCGGATTGGTGGTCGGGACGCCGCACATCTTGTCAACCAGGACGACCCTAATGTGCTGGAGA TCTGGAACCTTGTGTTCATCCAGTATAACAGGGAAGCTGATGGCATTCTGAAACCTCTTCCCAAGAAAAGCATTG ACACAGGGATGGGCCTGGAACGACTGGTATCTGTGCTGCAGAATAAGATGTCCAACTATGACACTGACCTTTTTG TCCCTTACTTTGAAGCCATTCAGAAGGGCACAGGTGCCCGACCATACACTGGGAAAGTTGGTGCTGAGGATGCCG ATGGGATTGACATGGCCTACCGGGTGCTGGCCTGACCATGCTCGGACCATCACTGTGGCACTGGCTGATGGTGGCC GGCCTGACAACACAGGGCGTGGATATGTGTTGAGACGGATTCTCCGCCGAGCTGTCCGATACGCCCATGAAAAGC TCAATGCCAGCAGGGGCTTCTTTGCTACGTTAGTGGATGTTGTCGTCCAGTCCCTGGGAGATGCATTTCCTGAGC TGAAGAAGGACCCAGACATGGTGAAGGACATCATTAATGAAGAAGAGGTGCAGTTTCTCAAGACTCTCAGCAGAG GGCGTCGCATCCTGGACAGGAAAATTCAGAGCCTGGGAGACAGCAAGACCATTCCCGGAGACACTGCTTGGCTCC TCTATGACACCTATGGGTTTCCAGTGGATCTGACTGGACTGATTGCTGAAGAGAGGGCCTGGTGGTAGACATGG ATGGCTTTGAAGAGGAGAGAAACTGGCCCAGCTGAAATCACAGGGCAAGGGAGCTGGTGGGGAAGACCTCATTA TGCTGGACATTTACGCTATCGAAGAGCTCCGGGCACGGGGTCTGGAGGTCACAGATGATTCCCCAAAGTACAATT ACCATTTGGACTCCAGTGGTAGCTATGTATTTGAGAACACAGTGGCTACGGTGATGGCTCTGCGCAGGGAGAAGA GAGGCCAGATCTATGACGAAGGCTACCTGGTGAAGGTGGATGACAGCAGTGAAGATAAAACAGAGTTTACAGTGA AGAATGCTCAGGTCCGAGGAGGGTATGTGCTACACATTGGAACCATCTACGGTGACCTGAAAGTGGGGGATCAGG $\verb|CCCTGCGCTCAGTGCTTGGGGAAGCTGACCAGAAAGGCTCATTGGTTGCTCCTGACCGCCTCAGATTTGACTTTA|\\$ CTGCCAAGGGAGCCATGTCCACCCAACAGATCAAGAAGGCTGAAGAGATTGCTAATGAGATGATTGAGGCAGCCA AGGCCGTCTATACCCAGGATTGCCCCCTGGCAGCGAAAGCCATCCAGGGCCTACGGGCTGTGTTTGATGAGA TCGTGACGGAAGAGCCATTGCCAAGGGTATCCGGAGGATTGTGGCTGTCACAGGTGCCGAGGCCCAGAAGGCCC TCAGGAAAGCAGAGAGCTTGAAGAAATGTCTCTCTGTCATGGAAGCCAAAGTGAAGGCTCAGACTGCTCCAAACA AGGATGTGCAGAGGGAGATCGCTGACCTTGGAGAGGCCCTGGCCACTGCAGTCATCCCCCAGTGGCAGAAGGATG AATTGCGGGAGACTCTCAAATCCCTAAAGAAGGTCATGGATGACTTGGACCGAGCCAGCAAAGCCGATGTCCAGA AACGAGTGTTAGAGAAGACGAAGCAGTTCATCGACAGCAACCCCAACCAGCCTCTTGTCATCCTGGAGATGGAGA GCGGCGCCTCAGCCAAGGCCCTGAATGAAGCCTTGAAGCTCTTCAAGATGCACTCCCCTCAGACTTCTGCCATGC TCTTCACGGTGGACAATGAGGCTGGCAAGATCACGTGCCTGTGTCAAGTCCCCCAGAATGCAGCCAATCGGGGCT TAAAAGCCAGCGAGTGCGCCAGCGGTGTCAGGCTTGATGGACGGTAAAGGTGGTGGCAAGGATGTGTCTGCAC $\tt GGGATGTAAAGAAC{\color{red}{\textbf{TGA}}} GTGGGGAAGGAGGAGGCTCCCACTGGATCCATCCGTCCAGCCAAGAGCTCTTCATCTG$ CTACAAGAACATTTGAATCTTGGGACCTTTAAAGAGCCCCTCCTAACCCAGCAGTAACTGGAACACACTTGGGAG ${\tt CAGTCCTATGTCTCAGTGCCCCTTAAATTTCTGCCCTGAGCCCTCCACGTCAGTGCCATCGGTCTAGAACCACTA}$ ACCCCGCATTGCTGTTGATCGTCACGCTCGCATCTATAGATAACGGCTCTCCAGACCTGAGCTTTCCGCGTCAGC AAGTAGGAATCGTTTTTGCTGCAGAGAATAAAAGGACCACGTGC

FIGURE 180

MDSTLTASEIRQRFIDFFKRNEHTYVHSSATIPLDDPTLLFANAGMNQFKPIFLNTIDPSHPMAKLSRAANTQKC IRAGGKQNDLDDVGKDVYHHTFFEMLGSWSFGDYFKELACKMALELLTQEFGIPIERLYVTYFGGDEAAGLEADL ECKQIWQNLGLDDTKILPGNMKDNFWEMGDTGPCGPCSEIHYDRIGGRDAAHLVNQDDPNVLEIWNLVFIQYNRE ADGILKPLPKKSIDTGMGLERLVSVLQNKMSNYDTDLFVPYFEAIQKGTGARPYTGKVGAEDADGIDMAYRVLAD HARTITVALADGGRPDNTGRGYVLRRILRRAVRYAHEKLNASRGFFATLVDVVVQSLGDAFPELKKDPDMVKDII NEEEVQFLKTLSRGRRILDRKIQSLGDSKTIPGDTAWLLYDTYGFPVDLTGLIAEEKGLVVDMDGFEEERKLAQL KSQGKGAGGEDLIMLDIYAIEELRARGLEVTDDSPKYNYHLDSSGSYVFENTVATVMALRREKMFVEEVSTGQEC GVVLDKTCFYAEQGGQIYDEGYLVKVDDSSEDKTEFTVKNAQVRGGYVLHIGTIYGDLKVGDQVWLFIDEPRRRP IMSNHTATHILNFALRSVLGEADQKGSLVAPDRLRFDFTAKGAMSTQQIKKAEEIANEMIEAAKAVYTQDCPLAA AKAIQGLRAVFDETYPDPVRVVSIGVPVSELLDDPSGPAGSLTSVEFCGGTHLRNSSHAGAFVIVTEEAIAKGIR RIVAVTGAEAQKALRKAESLKKCLSVMEAKVKAQTAPNKDVQREIADLGEALATAVIPQWQKDELRETLKSLKKV MDDLDRASKADVQKRVLEKTKQFIDSNPNQPLVILEMESGASAKALNEALKLFKMHSPQTSAMLFTVDNEAGKIT CLCQVPQNAANRGLKASEWVQQVSGLMDGKGGGKDVSAQATGKNVGCLQEALQLATSFAQLRLGDVKN

FIGURE 181

CGCACCGTTCGGCCCAGGCTAAGTTAGCCCTCACC ATG CCGGTCAAAGGAGGCACCAAGTGCATCAAATACCTGTCTCAGACCAAGAGCATCTTCGAGCAAGAAACTAATAATAATAATTCCAGCTTCTACACAGGAGTCTATATTCTG ATCGGAGCCGCCCCTCATGATGCTGGTGGGCTTCCTGGGCTGCTGCGGGGCTGTGCAGGAGTCCCAGTGCATG AAGGATGAGGTGATTAAGGAAGTCCAGGAGTTTTACAAGGACACCTACAACAAGCTGAAAACCAAGGATGAGCCC CAGCGGGAAACGCTGAAAGCCATCCACTATGCGTTGAACTGCTGTGGTTTGGCTGGGGGGCGTGGAACAGTTTATC TCAGACATCTGCCCCAAGAAGGACGTACTCGAAACCTTCACCGTGAAGTCCTGTCCTGATGCCATCAAAGAGGTC TTCGACAATAAATTCCACATCATCGGCGCAGTGGGCATCGGCATTGCCGTGGTCATGATATTTGGCATGATCTTC AGTATGATCTTGTGCTGTGCTATCCGCAGGAACCGCGAGATGGTCTACAGCTTACATCCCTGAGCAGGAAA CCACTAATTTTAGTATTCATTCTGCATTGCTAGATAAAAGCTGAAGTTACTTTATGTTTTGTCTTTTAATGCTTCA TTCAATATTGACATTTGTAGTTGAGCGGGGGGTTTGGTTTGCTTTGGTTTATATTTTTTCAGTTGTTTTTTG $\verb|CTTGTTATTATAGCAGAAATCCTGCAATGAAAGGTACTATATTTGCTAGACTCTAGACAAGATATTTGTACATAA|$ AAGAATTTTTTTTTTTTTTAAATAGATACAAATGTCTATCAACTTTAATCAAGTTGTAACTTATATTGAAGACAAT

204/2825 FIGURE 182

MPVKGGTKCIKYLLFGFNFIFWLAGIAVLAIGLWLRFDSQTKSIFEQETNNNNSSFYTGVYILIGAGALMMLVGF LGCCGAVQESQCMLGLFFGFLLVIFAIEIAAAIWGYSHKDEVIKEVQEFYKDTYNKLKTKDEPQRETLKAIHYAL NCCGLAGGVEQFISDICPKKDVLETFTVKSCPDAIKEVFDNKFHIIGAVGIGIAVVMIFGMIFSMILCCAIRRNR EMV

205/2825 FIGURE 183

CTTGCTCCGAGAGGGAGTCCTCGCGGACGTCAGCCAAGATTCCAGAATGACTATCTTGACTTACCCCTTTAAAAA TCTTCCCACTGCATCAAAATGGGCCCTCAGATTTTCCATAAGACCTCTGAGCTGTTCCTCCCAGCTACGAGCTGC CCCAGCTGTCCAGACCAAAACGAAGAGAGACGTTAGCCAAACCCAATATAAGGAATGTTGTGGTGGTGGATGGTGT TCGCACTCCATTTTTGCTGTCTGGCACTTCATATAAAGACCTGATGCCACATGATTTGGCTAGAGCAGCGCTTAC GGGTTTGTTGCATCGGACCAGTGTCCCTAAGGAAGTAGTTGATTATATCATCTTTGGTACAGTTATTCAGGAAGT GAAAACAAGCAATGTGGCTAGAGAGGCTGCCCTTGGAGCTGCCTTCTCTGACAAGACTCCTGCTCACACTGTCAC CATGGCTTGTATCTCTGCCAACCAAGCCATGACCACAGGTGTTGGCTTGATTGCTTCTGGCCAGTGTGATGTGAT CGTGGCAGGTGGTGTTGAGTTGATGTCCGATGTCCCTATTCGTCACTCAAGGAAAATGAGAAAACTGATGCTTGA TCTCAATAAGGCCAAATCTATGGGCCAGCGACTGTCTTTAATCTCTAAATTCCGATTTAATTTCCTAGCACCTGA GCTCCCTGCGGTTTCTGAGTTCTCCACCAGTGAGACCATGGGCCACTCTGCAGACCGACTGGCCGCTGCCTTTGC TGTTTCTCGGCTGGAACAGGATGAATATGCACTGCGCTCTCACAGTCTAGCCAAGAAGGCACAGGATGAAGGACT ACTGGAGCAGATGGCCAAACTAAAACCTGCATTCATCAAGCCCTACGGCACAGTGACAGCTGCAAATTCTTCTTT CTTGACTGATGGTGCATCTGCAATGTTAATCATGGCGGAGGAAAAGGCTCTGGCCATGGGTTATAAGCCGAAGGC ATATTTGAGGGATTTTATGTATGTGTCTCAGGATCCAAAAGATCAACTATTACTTGGACCAACATATGCTACTCC AAAAGTTCTAGAAAAGGCAGGATTGACCATGAATGATATTGATGCTTTTTGAATTTCATGAAGCTTTCTCGGGTCA GATTTTGGCAAATTTTAAAGCCATGGATTCTGATTGGTTTGCAGAAAACTACATGGGTAGAAAAACCAAGGTTGG ATTGCCTCCTTTGGAGAAGTTTAATAACTGGGGTGGATCTCTGTCCCTGGGACACCCATTTGGAGCCACTGGCTG TGGAGGGCAGGCCATGCTATGATAGTGGAAGCTTATCCAAAA**TAA**TAGATCCAGAAGAAGTGACCTGAAGTTTC TGTGCAACACTCACACTAGGCAATGCCATTTCAATGCATTACTAAATGACATTTGTAGTTCCTAGCTCCTCTTAG GAAAACAGTTCTTGTGGCCTTCTATTAAATAGTTTGCACTTAAGCCTTGCCAGTGTTCTGAGCTTTTCAATAATC TGTTGTCACTAAAGACTAAATGAGGGTTTGCAGTTGGGAAAGAGGTCAACTGAGATTTGGAAATCATCTTTGTAA TATTTGCAAATTATACTTGTTCTTATCTGTGTCCTAAAGATGTGTTCTCTATAAAATACAAACCAACGTGCCTAA TTAATTATGGAAAAATAATTCAGAATCTAAACACCACTGAAAACTTATAAAAAATGTTTAGATACATAAATATGG

206/2825 FIGURE 184

MTILTYPFKNLPTASKWALRFSIRPLSCSSQLRAAPAVQTKTKKTLAKPNIRNVVVVDGVRTPFLLSGTSYKDLM PHDLARAALTGLLHRTSVPKEVVDYIIFGTVIQEVKTSNVAREAALGAGFSDKTPAHTVTMACISANQAMTTGVG LIASGQCDVIVAGGVELMSDVPIRHSRKMRKLMLDLNKAKSMGQRLSLISKFRFNFLAPELPAVSEFSTSETMGH SADRLAAAFAVSRLEQDEYALRSHSLAKKAQDEGLLSDVVPFKVPGKDTVTKDNGIRPSSLEQMAKLKPAFIKPY GTVTAANSSFLTDGASAMLIMAEEKALAMGYKPKAYLRDFMYVSQDPKDQLLLGPTYATPKVLEKAGLTMNDIDA FEFHEAFSGQILANFKAMDSDWFAENYMGRKTKVGLPPLEKFNNWGGSLSLGHPFGATGCRLVMAAANRLRKEGG QYGLVAACAAGGQGHAMIVEAYPK

207/2825 FIGURE 185

GCTTAGTGTAACCAGCGGCGTATATTTTTTAGGCGCCTTTTCGAAAACCTAGTAGTTAATATTCATTTGTTTAAA TCTTATTTTATTTTTAAGCTCAAACTGCTTAAGAATACCTTAATTCCTTAAAGTGAAATAATTTTTTTGCAAAGGG GTTTCCTCGATTTGGAGCTTTTTTTTTTTCTTCCACCGTCATTTCTAAAACCCAACTCAGTTCCATCATCG TGATGTTCAAGAAGATCAAGTCTTTTGAGGTGGTCTTTAACGACCCTGAAAAGGTGTACGGCAGTGGCGAGAGGG TGGCTGGCCGGGTGATAGTGGAGGTGTGTGAAGTTACTCGTGTCAAAGCCGTTAGGATCCTGGCTTGCGGAGTGG CTAAAGTGCTTTGGATGCAGGGATCCCAGCAGTGCAAACAGACTTCGGAGTACCTGCGCTATGAAGACACGCTTC TTCTGGAAGACCAGCCAACAGGTGAGAATGAGATGGTGATCATGAGACCTGGAAACAATATGAGTACAAGTTCG CTTTTCTTGACCGCCCGAGCCAGCCAACTCAAGAGACAAAGAAAACTTTGAAGTAGTGGATCTGGTGGATGTCA AGAATACATGTTCCCGAATTGTGGTCCCCAAAGCTGCCATTGTGGCCCGCCACACTTACCTTGCCAATGGCCAGA CCAAGGTGCTGACTCAGAAGTTGTCATCAGTCAGAGGCAATCATATTATCTCAGGGACATGCGCATCATGGCGTG GCAAGAGCCTTCGGGTTCAGAAGATCAGGCCTTCTATCCTGGGCTGCAACATCCTTCGAGTTGAATATTCCTTAC TGATCTATGTTAGCGTTCCTGGATCCAAGAAGGTCATCCTTGACCTGCCCCTGGTAATTGGCAGCAGATCAGGTC TAAGCAGCAGAACATCCAGCATGGCCAGCCGAACCAGCTCTGAGATGAGTTGGGTAGATCTGAACATCCCTGATA ${\tt CCCCAGAAGCTCCTCCCTGCTATATGGATGTCATTCCTGAAGATCACCGATTGGAGAGCCCAACAACTCCTCTGC}$ $\tt CTTATACTGAGGTGGATCCCTGCATCCTCAACAACAATGTGCAG{\color{red}{\textbf{TGA}}} GCATGTGGAAGAAAAGAAGCAGCTTTAC$ CTACTTGTTTCTTTTTGTCTCTCCTGGACACTCACTTTTTCAGAGACTCAACAGTCTCGTCAATGGAGTGTG GGTCCACCTTAGCCTCTGACTTCCTAATGTAGGAGGTGGTCAGCAGGCAATCTCCTGGGCCTTAAAGGATGCGGA AGGCCCATCCATTTTCTCAGATCTCCTTGAAAATTGAGGCCTTTTCGATAGTTTCGGGTCAGGTAAAAATGGCCT TATCATGTGGAGAAGACCCAATTTAACAAACTAGGAAGATGAAAAGGGAAATTGTGGCCAAAACTTTGGGAAAAG TACTTTAACCTGGCTTTTAAAGCAGTAGTAACTGCCCCACCAAAGGTCTTAAAAGCCATTTTTGGAGCCTATTGC ACTGTGTTCTCCTACTGCAAATATTTTCATATGGGAGGATGGTTTTCTCTTCATGTAAGTCCTTGGAATTGATTC TAAGGTGATGTTCTTAGCACTTTAATTCCTGTCAAATTTTTTGTTCTCCCCTTCTGCCATCTTAAATGTAAGCTG AAACTGGTCTACTGTGTCTCTAGGGTTAAGCCAAAAGACAAAAAAATTTTACTACTTTTGAGATTGCCCCAATG TACAGAATTATATATTCTAACGCTTAAATCATGTGAAAGGGTTGCTGCTGTCAGCCTTGCCCACTGTGACTTCA AACCCAAGGAGGAACTCTTGATCAAGATGCCCAACCCTGTGATCAGAACCTCCAAATACTGCCATGAGAAACTAG TGCAGCTGCCAGCACTTGGTCAGTCACTCTCAGCCATAGCACTTTGTTCACTGTCCTGTGTCAGAGCACTGAGCT ACCC

208/2825 FIGURE 186

MVMFKKIKSFEVVFNDPEKVYGSGERVAGRVIVEVCEVTRVKAVRILACGVAKVLWMQGSQQCKQTSEYLRYEDT LLLEDQPTGENEMVIMRPGNKYEYKFGFELPQGPLGTSFKGKYGCVDYWVKAFLDRPSQPTQETKKNFEVVDLVD VNTPDLMAPVSAKKEKKVSCMFIPDGRVSVSARIDRKGFCEGDEISIHADFENTCSRIVVPKAAIVARHTYLANG QTKVLTQKLSSVRGNHIISGTCASWRGKSLRVQKIRPSILGCNILRVEYSLLIYVSVPGSKKVILDLPLVIGSRS GLSSRTSSMASRTSSEMSWVDLNIPDTPEAPPCYMDVIPEDHRLESPTTPLLDDMDGSQDSPIFMYAPEFKFMPP PTYTEVDPCILNNNVQ

209/2825 FIGURE 187

GAAAGCTGTATTTGCTGCACGTGGAAATCTCCGTTATTTTCCAGCACCCAACAGTAGCGTAATGGGAGTAACGGA CTTAACCTCATTTCTCTTTCAGAGCATTTAGCCTTCATATGCCCTTCCCTGCATGCTTCCCCAGGCCGTCAAGA CTTGAGTTCTGCCTCGCTTCCCGGCGCGGTCGCAGCCCTCAGCCCACTTAGGATAATGGCGACAGCTGAGGTACT GAACATTGGTAAAAAATTATATGAGGGTAAAACAAAAGAAGTCTACGAATTGTTAGACAGTCCAGGAAAAGTCCT AAATAAAATCACCAGTTGTATTTTTCAGTTATTACAGGAAGCAGGTATTAAAACTGCCTTCACCAGAAAATGTGG GGAGACAGCTTTCATTGCACCGCAGTGTGAAATGATTCCAATTGAATGGGTTTGCAGAAGAATAGCAACTGGTTC TTTTCTCAAAAGAAATCCTGGTGTCAAGGAAGGATATAAGTTTTACCCACCTAAAGTGGAGTTGTTTTTCAAGGA TGATGCCAATAATGACCCACAGTGGTCTGAGGAACAGCTGATTGCTGCAAAAATTTTGCTTTGCTGGACTTCTTAT AGGCCAGACTGAAGTGGATATCATGAGTCATGCTACACAGGCTATATTTGAAATACTGGAGAAATCCTGGTTGCC TGTTATTGACAATGATTCCTGGAGACTCTGGCCATCAGGAGATCGAAGCCAACAGAAAGACAAACAGTCTTATCG GTTGCTTTTGAAATCAGAAAGTCAGTGCAGGGTTGTAGTGTTGATGGGCTCTACTTCTGATCTTGGTCACTGTGA AAAAATCAAGAAGGCCTGTGGAAATTTTGGCATTCCATGTGAACTTCGAGTAACATCTGCGCATAAAGGACCAGA TAATGGTTTGGGACCAGTGATGTCTGGGAACACTGCATATCCAGTTATCAGCTGTCCTCCCCTCACACCAGACTG GGGAGTTCAGGATGTGTGGTCTTCTCTTCGACTACCCAGTGGTCTTGGCTGTTCAACCGTACTTTCTCCAGAAGG ${\tt GAACACATGGATTTCCTTGAAGCAGGCTGACAAGAAAATCAGAGAATGTAATTTA} \underline{{\tt TAA}}{\tt GAAAGAATGCCATTGAA}$ TAGAGAACAAATAAAATGTATTAGTGAATAAATGCTTCTCTAGATCCATATTAATAAACATGAGCATCTAACC AGTATTGGTGGTCACTACTATTGAGTTTCTTCCTTAACACTGATTAAATGATCTTAACTCCCTCAGCTAAAACTG $\tt CCCAGGCTGGAGTGCAGTGGCGTGATCTCAGTTCACTGCTGCTTTCCCTCCTGGGCTCAAGCAGTTCTCCCACCT$ CTCACTATGTCACCCAGGTTCGTCTCAAACTCCTGAACCCTAGTAATTCTCCTATCTCAGCCTCCCAAAGTGCTA GGCACTCATGAAAAACAGAATGCTCCCAACTTTATTCATCTTCCAAGCCTGTAGCTCTTGGTATACTCACTGTT TGTTAATTTCTGATTAACCCTTGAATTTACCGTCTTCTCATCCTCTGTACAAAAGCCTCAAGTGAGGGTCAAATT CAACATTATCCTGATCTAGACAGCCCCCATTCTCAATCCACCCTTTTCCAAGTTGATTGCCCAAGGACTTCTAAC AATAAACTCTCTTTTGCACCACAGACTTCTTTGAAAATATACATGCTGTTGACCCTCTCTGTAGAAAACCGCACA CATAAAACTTACCAACAGATTTCATTGGTTCTTGGGTTCTCCCGAAGCCTATCCATGGTTTATAGATTAAGAATT AGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGTGAAACCCTGTCTCTACTAAAAATACAAAAAGTAGCCAGC CGTGATGACAGGCACCTGTAATCCCAGCTACTCGGGAGGCTGAGGCATGAGAATTGCTTGAACCCGGGAGGCGGA GGTTGCAGTGAGCCTGGATCATGCCACTGCACTCCAACCTGGGCAGCAGAGCCAGAGCTCTGTCTCAAAAAGGGGAA AAAAAAATTGCTGATGTGACCCATGAAGGGAACTCATTTTCCTCGTAATTTTGGACTGCCACACATTGGTACCT TTAGTTCTCTGAAGGCCCACGTTTTTATCATTAAGACCTATTTGTTAGCTAGTAGAGCTTTATGTTCGCTGTCCA TGAAACCTTCTGTAACCACAGTGACTACAAGTAGTTCTTTTCTCTATTGAATTATTAGGTCCAGAATAGAAGATGT CATTGTACACTTTATTTCCCTCACACTGTGTTATGCTCTGATGTGCTATGCTTAGCTATCTGTCAGAGATTAGTA AATTATAAAACTCATGTGTACTAAGTTTATATCTTATGCTAGTTTATAAGAACAATTAAAAGGACTTAGAA GATTAAAAAAAAAAAAAAAAA

210/2825 FIGURE 188

MATAEVLNIGKKLYEGKTKEVYELLDSPGKVLLQSKDQITAGNAARKNHLEGKAAISNKITSCIFQLLQEAGIKT AFTRKCGETAFIAPQCEMIPIEWVCRRIATGSFLKRNPGVKEGYKFYPPKVELFFKDDANNDPQWSEEQLIAAKF CFAGLLIGQTEVDIMSHATQAIFEILEKSWLPQNCTLVDMKIEFGVDVTTKEIVLADVIDNDSWRLWPSGDRSQQ KDKQSYRDLKEVTPEGLQMVKKNFEWVAERVELLLKSESQCRVVVLMGSTSDLGHCEKIKKACGNFGIPCELRVT SAHKGPDETLRIKAEYEGDGIPTVFVAVAGRSNGLGPVMSGNTAYPVISCPPLTPDWGVQDVWSSLRLPSGLGCS TVLSPEGSAQFAAQIFGLSNHLVWSKLRASILNTWISLKQADKKIRECNL

211/2825 FIGURE 189

CGGGGAGGACGGTCTGCATACTCGCTGCCCGCCGCCTCCCCCCGCGTCCCTGCGACCGCCGCGAGGAAGATG

GCCTCAGGAGTGCAAGTAGCTGATGAAGTATGTCGCATTTTTTATGACATGAAAGTTCGTAAATGCTCCACACCA GAAGAAATCAAGAAAAGAAGAAGGCTGTCATTTTTTGTCTCAGTGCAGACAAAAAGTGCATCATTGTAGAAGAA GGCAAAGAGATCTTGGTTGGAGATGTTGGTGTAACCATAACTGATCCTTTCAAGCATTTTTGTGGGAATGCTTCCT GAAAAAGATTGTCGCTATGCTTTGTATGATGCAAGCTTTGAAACAAAAGAATCCAGAAAAGAAGAGTTGATGTTT TTTTTGTGGGCACCAGAACTAGCACCTCTGAAAAGTAAAATGATCTATGCAAGCTCCAAGGATGCAATTAAAAAG AAATTTCAAGGCATAAAACATGAATGTCAAGCAAATGGACCAGAAGATCTCAATCGGGCTTGTATTGCTGAAAAG ${\tt TTAGGTGGATCCTTAATTGTAGCCTTTGAAGGATGCCCTGTG{\tt TAG}ATTATTCAGTGCCACAAATTGAAAGCTTCC}$ ATGTTTAATGTTATCCTCTTGCTATATAAATAAAGCAAATATATTTTAGGCCAGGGTCTCACTGAGGGGGAGCTGT ATTGATGTGAAATTAAATTCTTATTGGCCAAATGCCTGTTTTGATGAGTTGATTTATAAAGATTTTTGTTAAGCT CAGGATTTTAAATTACACAGTTCACAAACAGTAAAGGCCATGTGAAGAGAATTATTACATCTTTATTAACCTCAG ${\tt CATTTACTTTGTTTCTTTGCTTAGGAAATTGCTCATAATCTGGTTATAATTTTGGTCCAAATTCTTTATTCTTC}$ CTTGAGCTAAGCAGAATAATGGGAATATAATATGTCTTCATAATATAACAACACTAATACACTAATAGGTAAGATTA AGTTAGGCAGTCTTCTACCAAATGTGTAATGGAGATTGCCTCAAAATTGTGTCCACATAATCCACGCTCATCTTG CAAAGCGCTATTTCAGGCACATCATTGGAATACAGGAAGTAGCCCTGCACCTGCAGTGAGCTCGCCATTCACTG ATTGGAAGAGTGACCTGGCATCTTGGAAATCATTGTGTGTCTTCAGGAGAATGTGCAGTGTCTTGTAACAACTAA TTAATAATGCAAATTAGGGCTACATTGTAATCTGCTTTGTTAATGAAAATGATAAAACAGAATATTGACAAGCTA GGACACCTGTGGTATCTTTAATTGTATCTCCTTCAGAAGTTTGCTTCTTATGGTATAATAAAGTATGGAAGAATA AAAAAAAAAAAA

212/2825 FIGURE 190

MASGVQVADEVCRIFYDMKVRKCSTPEEIKKRKKAVIFCLSADKKCIIVEEGKEILVGDVGVTITDPFKHFVGML PEKDCRYALYDASFETKESRKEELMFFLWAPELAPLKSKMIYASSKDAIKKKFQGIKHECQANGPEDLNRACIAE KLGGSLIVAFEGCPV

FIGURE 191

GCAACCAGGAGATTCCCTGGGCCTGCAGGAAGCCCTTCCGCGGACCGAAAGATTGTTCCCCATTTTGGAGATGAA GAAACTGAGACTCAAAGCAGCTGACTTCCCAAGGACACACTGAACTGGGCGGTGATCAGGATCTGAAT GCACAGGGCGGGTGTTCAGTGATTGTTTACTACGTTGAACGTGACCTCCAGGAAAGCAGTTCTGGCCGAGATCCC GGTGCTGTCAGTGGCATGCCCAAACCCAAAGCTGGAAGAGGAATAAATTACAAGTGGTCAAGGTTGCTGCTGTGT GTGGAGGTGCTGTCAGTGGCATGCCCAAACCCAAAGCTGGAAGAGGAATAAATTACAAGTGGTCAAGGTTGCATC CTTTTGAGCCCAGGACCTGCTTGTAAGCCGAGAGGGTTCTCTGGCCCTAATCTAGCCAAGCACCATGGAGAGAAT CAGTGCCTTCTTCAGCTCTATCTGGGACACCATCTTGACCAAACACCAAGAAGGCATCTACAACACCATCTGCCT GGGAGTCCTCCTGGGCCTGCCACTCTTGGTGATCATCACACTCCTCTTCATCTGTTGCCATTGCTGCTGGAGCCC CACTATGTCCATGTCCACAGAGTAACTACTCAACCAAGGAACAAACCTCAGACTAAGTGTCCCAGTGGAGGGAAG TCCCAGGGACCACGTGGACAATTCTTGGATACTGTCTTGGCAGCTATGTGTCCAATAGCAATGCTCCTTACTGCA GACCCAGGCATGCCTCCCACCTGTCTCTGGCATACCCCACATGCAAAGCACAAAGAACATTTATCCATACATCTC TATATTCTGCTCATCAAATGGTCATTGGCTATGTACTTTGTGCAGGGAAGTACATTATCTACAGTCACAAAAATG TCTCATGGGAAAGCCTTGCCAGATTCAGACACATATATACAATTTCCTAACCAGCAAGGCCCCCATACACCATCT ATTCCATAAACCACTCAGGTTACAGATGCATGCTTTCCTATTTCTAACTCTACACATAAACTTTTACTGGAAGTA CTCATAATTGGACATTCCAGCAACCTGCTACAGTCCCCACCCTTGTGTGTCTTGATACAGACACACCAAGTTTCT TCGAGACCGGCGCGGAGGAGACGCACGCAGCTGACTTTGTCTTCTCCGCACGACTGTTACAGAGGTCTCCAGAG CCTTCTCTCTCTGTGCAAAATGGCAACTCTTAAGGAAAAACTCATTGCACCAGTTGCGGAAGAAGAGGCCAACAG TTCCAAACAATAAGATCACTGTAGTGGGTGTTGGACAAGTTGGTATGGCGTGTGCTATCAGCATTCTGGGAAAGT CTCTGGCTGATGAACTTGCTCTTGTGGATGTTTTGGAAGATAAGCTTAAAGGAGAAATGATGGATCTGCAGCATG GGAGCTTATTTCTCAGACACCTAAAATTGTGGCAGATAAAGATTATTCTGTGACCGCCAATTCTAAGATTGTAG TGGTAACTGCAGGAGTCCGTCAGCAAGAAGGGGAGAGTCGGCTCAATCTGGTGCAGAGAAATGTTAATGTCTTCA AATTCATTATTCCTCAGATCGTCAAGTACAGTCCTGATTGCATCATAATTGTGGTTTCCAACCCAGTGGACATTC TTACGTATGTTACCTGGAAACTAAGTGGATTACCCAAACACCGCGTGATTGGAAGTGGATGTAATCTGGATTCTG ATGGCGACTCAAGTGTGGCTGTGTGGAGTGGTGTGAATGTGGCAGGTGTTTCTCTCCAGGAATTGAATCCAGAAA TGGGAACTGACAATGATAGTGAAAATTGGAAGGAAGTGCATAAGATGGTGGTTGAAAGTGCCTATGAAGTCATCA AGCTAAAAGGATATACCAACTGGGCTATTGGATTAAGTGTGGCTGATCTTATTGAATCCATGTTGAAAAATCTAT ${\tt CCAGGATTCATCCCGTGTCAACAATGGTAAAGGGGGATGTATGGCATTGAGAATGAAGTCTTCCTGAGCCTTCCAT}$ GTATCCTCAATGCCCGGGGATTAACCAGCGTTATCAACCAGAAGCTAAAGGATGATGAGGTTGCTCAGCTCAAGA AAAGTGCAGATACCCTGTGGGACATCCAGAAGGACCTAAAAGACCTG**TGA**CTAGTGAGCTCTAGGCTGTAGAAAT TTAAAAACTACAATGTGATTAACTCGAGCCTTTAGTTTTCATCCATGTACATGGATCACAGTTTGCTTTGATCTT CTTCAATATGTGAATTTGGGCTCACAGAATCAAAGCCTATGCTTGGTTTAATGCTTGCAATCTGAGCTCTTGAAC

FIGURE 192

MATLKEKLIAPVAEEEATVPNNKITVVGVGQVGMACAISILGKSLADELALVDVLEDKLKGEMMDLQHGSLFLQT PKIVADKDYSVTANSKIVVVTAGVRQQEGESRLNLVQRNVNVFKFIIPQIVKYSPDCIIIVVSNPVDILTYVTWK LSGLPKHRVIGSGCNLDSARFRYLMAEKLGIHPSSCHGWILGEHGDSSVAVWSGVNVAGVSLQELNPEMGTDNDS ENWKEVHKMVVESAYEVIKLKGYTNWAIGLSVADLIESMLKNLSRIHPVSTMVKGMYGIENEVFLSLPCILNARG LTSVINQKLKDDEVAQLKKSADTLWDIQKDLKDL

FIGURE 193

CGCTGCCACACCATGGCCTTCGTCACCAGGCAGTTCATGCGTTCCGTGTCCTCCTCGTCCACCGCCTCGGCCTCG GCCAAGAAGATAATCGTCAAGCACGTGACGGTCATCGGCGGCGGGCTGATGGCCCGGCATTGCCCAGGTTGCT GAAAGCCTTAGGAAAGTGGCAAAGAAGAAGTTTGCAGAAAACCCTAAGGCCGGCGATGAATTTGTGGAGAAGACC CTGAGCACCATAGCGACCACGGATGCAGCCTCCGTTGTCCACAGCACAGACTTGGTGGAAGCCATCGTG GAGAATCTGAAGGTGAAAAACGAGCTCTTCAAAAGGCTGGACAAGTTTGCTGCTGAACATACAATCTTTGCCAGC TTGGTAGACTTTAGCAAAGCCCTAGGAAAGCATCCTGTTTCTTGCAAGGACACTCCTGGGTTTATTGTGAACCGC $\verb|CTCCTGGTTCCATACCTCATGGAAGCAATCAGGCTGTATGAACGAGGTGACGCATCCAAAGAAGAACATTGACACT| \\$ GCTATGAAATTAGGAGCCGGTTACCCCATGGGCCCATTTGAGCTTCTAGATTATGTCGGACTGGATACTACGAAG TTCATCGTGGATGGGTGGCATGAAATGGATGCAGAGAACCCATTACATCAGCCCAGCCCATCCTTAAATAAGCTG GTAGCAGAGAACAAGTTCGGCAAGAAGACTGGAGAAGGATTTTACAAATACAAG**TGA**TGTGCAGCTTCTCCGGCT $\verb|CTGAGAAGAACACCTGAGAGGGGCTTTCCAGCCAGTGCCCCGAGTGCCTGTGGGAATGCTCTTTGGTCAGACATTC| \\$ CCTCACACAGTACAGTTTAATAAATGTGCATTTTGATTGTAATCTATCGAAGTGATTATTACACCAGTTACAGCA GTAATAGATTCTCCATTAAGAAATAATTCCCTTTTTTAGTCTGTTCATTTCTGTGTATTTTCTAAACAGCTTTAC CATCAACGGGAAAGTACTTCCTCTGAGAGTGCGAGTGCACCATGCTCACTGTTGCTGCGTGGGAGAGTCACAAGC ${\tt CACTGGCAAGCAAGTGGTATAGTCTGTGAAGCACTGCAGCGAGCACCTGGATCTTGCCTTTATAAGAACATT}$ AAGATGCTGCTGCTGAATGGGTCAGCATATCTCTGTTTGCATGGTTTGCAGGAGGTCGGTTTTCATGGTCATTCA GTTCCACAGATCTGAATGATTACTGTCTGTCTGTCTTTTTTCCATGAGAAATCACTGTTGCAAATTGCCTATA AATTGACTCTACTAAAATAACAATGTTTCAGTCTGAAAATTTGAATTGAAAAAAATGTATAAAATTGTAA AA

FIGURE 194

MAFVTRQFMRSVSSSSTASASAKKIIVKHVTVIGGGLMGAGIAQVAAATGHTVVLVDQTEDILAKSKKGIEESLR KVAKKKFAENPKAGDEFVEKTLSTIATSTDAASVVHSTDLVVEAIVENLKVKNELFKRLDKFAAEHTIFASNTSS LHITSIANATTRQDRFAGLHFFNPVPVMKLVEVIKTPMTSQKTFESLVDFSKALGKHPVSCKDTPGFIVNRLLVP YLMEAIRLYERGDASKEDIDTAMKLGAGYPMGPFELLDYVGLDTTKFIVDGWHEMDAENPLHQPSPSLNKLVAEN KFGKKTGEGFYKYK

217/2825 FIGURE 195

 $\verb|CCCGGACGTGCGGCTCCCCTCGGCCTATGGACGCGGACGACTCCCGGGCCCCCAAGGGCTCCTTGCGG|$ AAGTTCCTGGAGCACCTCTCCGGGGCCGGCAAGGCCATCGGCGTGCTGACCAGCGGCGGGGATGCTCAAGGTATG AACGCTGCCGTCCGTGCCGTGCGCATGGGTATCTACGTGGGGGCCAAGGTGTACTTCATCTACGAGGGCTAC CAGGGCATGGTGGACGGAGGCTCAAACATCGCAGAGGCCGACTGGGAGAGTGTCTCCAGCATCCTGCAAGTGGGC GAGTGGAGTGGGCTGCTGGAGGAGCTGGCCAGGAACGGCCAGATCGATAAGGAGGCCGTGCAGAAGTACGCCTAC $\tt CTCAACGTGGTGGGCATGGTGGGCTCCATCGACAATGATTTCTGCGGCACCGACATGACCATCGGCACGGACTCC$ GCCCTGCACAGGATCATCGAGGTCGTCGACGCCATCATGACCACGGCCCAGAGCCACCAGAGGACCTTCGTTCTG GAGGTGATGGGACGACACTGTGGGTACCTGGCCCTGGTGAGTGCCTTGGCCTGCGGTGCGGACTGGGTGTTCCTT AGGCTGAATATTATTGTGGCTGAAGGAGCAATTGATACCCAAAATAAACCCATCACCTCTGAGAAAATCAAA GAGCTTGTCGTCACGCAGCTGGGCTATGACACACGTGTGACCATCCTCGGGCACGTGCAGAGAGGGGGACCCCT TCGGCATTCGACAGGATCTTGGCCAGCCGCATGGGAGTGGAGGCAGTCATCGCCTTGCTAGAGGCCACCCCGGAC AACCTGAACACCTACAAGCGACTTGCCATCAAGCTGCCGGATGATCAGATCCCAAAGACCAATTGCAACGTAGCT GTCATCAACGTGGGGGCACCCGCGGCTGGGATGAACGCGGCCGTACGCTCAGCTGTGCGCGTGGGCATTGCCGAC GGCCACAGGATGCTCGCCATCTATGATGGCTTTGACGGCTTCGCCAAGGGCCAGATCAAAGAAATCGGCTGGACA GATGTCGGGGGCTGGACCGGCCAAGGAGGCTCCATTCTTGGGACAAAACGCGTTCTCCCGGGGAAGTACTTGGAA GAGATCGCCACACAGATGCGCACGCACAGCATCAACGCGCTGCTGATCATCGGTGGATTCGAGGCCTACCTGGGA CTCCTGGAGCTGTCAGCCGCCCGGGAGAAGCACGAGGAGTTCTGTGTCCCCATGGTCATGGTTCCCGCTACTGTG TCCAACAATGTGCCGGGTTCCGATTTCAGCATCGGGGCAGACACCGCCCTGAACACTATCACCGACACCTGCGAC CGCATCAAGCAGTCCGCCAGCGGAACCAAGCGGCGCGTGTTCATCATCGAGACCATGGGCGGCTACTGTGGCTAC $\verb|CTGGCCAACATGGGGGGGGCTCGCGGAGCTGATGCCGCATACATTTTCGAAGAGCCCTTCGACATCAGGGAT| \\$ CTGCAGTCCAACGTGGAGCACCTGACGGAGAAATGAAGACCACCATCCAGAGAGGCCTTGTGCTCAGAAATGAG AGCTGCAGTGAAAACTACACCACCGACTTCATTTACCAGCTGTATTCAGAAGAGGGGCAAAGGCGTGTTTGACTGC ${\tt AGGAAGAACGTGCTGGGTCACATGCAGCAGGGTGGGGCACCCTCTCCATTTGATAGAAACTTTGGAACCAAAATC}$ TCTGCCAGAGCTATGGAGTGGATCACTGCAAAACTCAAGGAGGCCCGGGGCAGAGGAAAAAAATTTACCACCGAT GATTCCATTTGTGTGCTGGGAATAAGCAAAAGAAACGTTATTTTCAACCTGTGGCAGAGCTGAAGAAGCAAACG GATTTTGAGCACAGGATTCCCAAAGAACAGTGGTGGCTCAAGCTACGGCCCCTCATGAAAATCCTGGCCAAGTAC AAGGCCAGCTATGACGTGTCGGACTCAGGCCAGCTGGAACATGTGCAGCCCTGGAGTGTC TGACCCAGTCCCGCCTGCATGTGCCTGCAGCCACCGTGGACTGTCTGTTTTTGTAACACTTAAGTTATTTTATCAGCACTTTATGCACGT

FIGURE 196

MDADDSRAPKGSLRKFLEHLSGAGKAIGVLTSGGDAQGMNAAVRAVVRMGIYVGAKVYFIYEGYQGMVDGGSNIA EADWESVSSILQVGGTIIGSARCQAFRTREGRLKAACNLLQRGITNLCVIGGDGSLTGANLFRKEWSGLLEELAR NGQIDKEAVQKYAYLNVVGMVGSIDNDFCGTDMTIGTDSALHRIIEVVDAIMTTAQSHQRTFVLEVMGRHCGYLA LVSALACGADWVFLPESPPEEGWEEQMCVKLSENRARKKRLNIIIVAEGAIDTQNKPITSEKIKELVVTQLGYDT RVTILGHVQRGGTPSAFDRILASRMGVEAVIALLEATPDTPACVVSLNGNHAVRLPLMECVQMTQDVQKAMDERR FQDAVRLRGRSFAGNLNTYKRLAIKLPDDQIPKTNCNVAVINVGAPAAGMNAAVRSAVRVGIADGHRMLAIYDGF DGFAKGQIKEIGWTDVGGWTGQGGSILGTKRVLPGKYLEEIATQMRTHSINALLIIGGFEAYLGLLELSAAREKH EEFCVPMVMVPATVSNNVPGSDFSIGADTALNTITDTCDRIKQSASGTKRRVFIIETMGGYCGYLANMGGLAAGA DAAYIFEEPFDIRDLQSNVEHLTEKMKTTIQRGLVLRNESCSENYTTDFIYQLYSEEGKGVFDCRKNVLGHMQQG GAPSPFDRNFGTKISARAMEWITAKLKEARGRGKKFTTDDSICVLGISKRNVIFQPVAELKKQTDFEHRIPKEQW WLKLRPLMKILAKYKASYDVSDSGQLEHVQPWSV

FIGURE 197

TCGCTGCGAAGGACATTTGGGCTGTGTGTGCGACGCGGGTCGGAGGGGCAGTCGGGGGAACCCGCAAGAAGCCGA GGAGCCCGGAGCCCCGCGTGACGCTCCTCTCTCAGTCCAAAAGCGGCTTTTGGTTCGGCGCAGAGAGACCCGGGG GTCTAGCTTTTCCTCGAAAAGCGCCGCCCTGCCCTTGGCCCCGAGAACAGACAAAGAGCACCGCAGGGCCGATCA GGGAGCGAGCGCCCAATGCCTGCTGCACTGCCGCTCCTTCTTCGCTTTCAACGCCGGCCACATCGCCGGCT ACGCCGAGCTCCGCGGCCGCCTGCTGGCCGCCCTACCACGCCGTGTTTGCTGGACGAGCGCAGCGCCCCCC TCTTCTTCCTCAAAGGAGGATACGAAGCGTTTTCGGCTTCCTGCCCGGAGCTGTGCAGCAAACAGTCGACCCCCA TGGGGCTCAGCCTTCCCCTGAGTACTAGCGTCCCTGACAGCGCGGAATCTGGGTGCAGTTCCTGCAGTACCCCAC TCTACGATCAGGGTGGCCCGGTGGAAATCCTGCCCTTTCTGTACCTGGGCAGTGCGTATCACGCTTCCCGCAAGG ACATGCTGGATGCCTTGGGCATAACTGCCTTGATCAACGTCTCAGCCAATTGTCCCAACCATTTTGAGGGTCACT ACCAGTACAAGAGCATCCCTGTGGAGGACAACCACAAGGCAGACATCAGCTCCTGGTTCAACGAGGCCATTGACT TCTGCCTTGCTTACCTTATGAGGACTAATCGAGTCAAGCTGGACGAGGCCTTTGAGTTTGTGAAGCAGAGGCGAA GCATCATCTCTCCCAACTTCAGCTTCATGGGCCAGCTGCTGCAGTTTGAGTCCCAGGTGCTGGCTCCGCACTGTT CGGCAGAGGCTGGGAGCCCCGCCATGGCTGTGCTCGACCGAGGCACCTCCACCACCACCGTGTTCAACTTCCCCG **GA**AAGGCCACGGGAGGTGAGGCTCTTCACATCCCATTGGGACTCCATGCTCCTTGAGAGGAGAAATGCAATAACT CTGGGAGGGGCTCGAGAGGGCTGGTCCTTATTTATTTAACTTCACCCGAGTTCCTCTGGGTTTCTAAGCAGTTAT GGTGATGACTTAGCGTCAAGACATTTGCTGAACTCAGCACATTCGGGACCAATATATAGTGGGTACATCAAGTCC AGAATCTCTTCATGCTTGACATACCTACCAGTATTATTCCCGACGACACATATACATATGAGAATATACCTTATT TATTTTTGTGTAGGTGTCTGCCTTCACAAATGTCATTGTCTACTCCTAGAAGAACCAAATACCTCAATTTTTGTT GAAGACATTTTGTTACATAAGGATGACTTTTTTATACAATGGAATAAATTATGGCATTTCTATTG

220/2825 FIGURE 198

MVMEVGTLDAGGLRALLGERAAQCLLLDCRSFFAFNAGHIAGSVNVRFSTIVRRRAKGAMGLEHIVPNAELRGRL LAGAYHAVVLLDERSAALDGAKRDGTLALAAGALCREARAAQVFFLKGGYEAFSASCPELCSKQSTPMGLSLPLS TSVPDSAESGCSSCSTPLYDQGGPVEILPFLYLGSAYHASRKDMLDALGITALINVSANCPNHFEGHYQYKSIPV EDNHKADISSWFNEAIDFIDSIKNAGGRVFVHCQAGISRSATICLAYLMRTNRVKLDEAFEFVKQRRSIISPNFS FMGQLLQFESQVLAPHCSAEAGSPAMAVLDRGTSTTTVFNFPVSIPVHSTNSALSYLQSPITTSPSC

FIGURE 199

 $\verb|CCTACATTCCCTCTCCCGGCCAGATGCCCTTTGGAAAGCCATTGACCACCACCATATTGTTTGATCTACTTCAT| \\$ AGCTCCTTGGAGCAGCCAAAAAAGGGACAGCATGCCCCTTGGCTGGATCAGGGAATCCAGCTCCCTAGACTGCAT GGCCCAAGGTCCCCTCACATCCCAGCAGCCCAAGCTTAATAGCCCTCCCCCTCAACCTCACCATTGTGAAGCAC CTACTATGTGCTGGGTGCCTCCCACACTTGCTGGGGCTCACGGGGCCTCCAACCCATTTAATCACCATGGGAAAC TCGTGGTTATTAGCAAGGCTGGGTAATGTGAAGGCCCAAGAGCAGAGTCTGGGCCTCTGACTCTGAGTCCACTGC GATCCTCTCCACTCCATGTTTGCAATGCTTTTATATGGCCCAGCCTTGTAAATAACCACAAGGTCCACTCCCTGC TCCACGAAGCCTTAAGCCATAGGCCCAGGATATTTCTGAGAGTGAAACCATGACTGTGACCACCTTCTGTCCCCA GCCCTGTCCTGGTTCCTTCCTATGCCCAGGTACCACCCTTCAGACCCCAGTTCTAGGGGGAGAAGAGCCCTGGACA TAACCAACAAGGTTGGCACCCCAGCTACCCCTTCTTTGCAGGGCCTAAGGCCCCCAAACATAGCCCCTGCCCCGGA GGAAGCTTGGGGAACCCATGAGTTGTCAGCTTTGACTTTATCTCCTGCTCTTTTCTACATGACTGGGCCTCCCTTG GGCTGGAAGAATTGGGGGATTCTCTATTGGAGGTGAGATCACAGCCTCCAGGGCCCCCCAAATCCCAGGGAAGGAC TTGGAGAGAATCATGCTGTTGCATTTAGAACTTTCTGCTTTGCACAGGAAAGAGTCACACAATTAATCAACATGT ATATTTTCTCTATACATAGAGCTCTATTTCTCTACGGTTTTATAAAAGCCTTGGGTTCCAACCAGGCAGTAGATG

FIGURE 200

CTCTTTATAATTTAGTTTCCATAGAAGTTATATGTGCATTTAAAAAAATTCAATGCTGGAGCGACCGTGTCTGGG AGCAGCAGACGCCTGAGAGCCGAGGCCGTCAGGGTTTGGAGACCCTGACACCCCACCTTCTCACCTGGG CTCTGCGTATCCCCCAGCCTTGAGGGAAGATGAAGCCTAAACTGATGTACCAGGAGCTGAAGGTGCCTGCAGAGG TCTCTTTGGGCCCAACCAGCGCCCAGCCCCTGCTATGACCCTTGCGAAGCAGTGCTGGTGGAAAGCATTCCTGA GCACAGCAGCCTGGACATCGCCTCCTTCTACTGGACCCTCACCAACAATGACACCCACACGCAGGAGCCCTCTGC CATGCAGAAGCTGACCCATGGCGTCCTGCATACCAAGTTCTGGGTGGTGGACCAGACCCACTTCTACCTGGGCAG TGCCAACATGGACTGGCGTTCACTGACCCAGGTCAAGGAGCTGGGCGTGGTCATGTACAACTGCAGCTGCCTGGC $\verb|CCGGTTCTATGACACCCGCTACAACCAAGAGACACCAATGGAGATCTGCCTCAATGGAACCCCTGCTCTGGCCTA|\\$ CCTGGCGAGTGCGCCCCACCCCTGTGTCCAAGTGGCCGCACTCCAGACCTGAAGGCTCTACTCAACGTGGTGGA CAATGCCCGGAGTTTCATCTACGTCGCTGTCATGAACTACCTGCCCACTCTGGAGTTCTCCCACCCTCACAGGTT TGACATCCAGGTGAAACTCTTTGTGGTCCCCGCGGATGAGGCCCAGGCTCGAATCCCATATGCCCGTGTCAACCA CAACAAGTACATGGTGACTGAACGCGCCACCTACATCGGAACCTCCAACTGGTCTGGCAACTACTTCACGGAGAC GGCGGGCACCTCGCTGCTGGTGACGCAGAATGGGAGGGCGGCCTGCGGAGCCAGCTGGAGGCCATTTTCCTGAG GGACTGGGACTCCCCTTACATTCATGACCTTGACACCTCAGCTGACAGCGTGGGCAACGCCTGCCGCCTGCTCTG **A**GGCCCGATCCAGTGGGCAGGCCAAGGCCTGCTGGGCCCCCGCGGACCCAGGTGCTCTGGGTCACGGTCCCTGTC GCATGCTGGCCTGCCCCTGGCCCACCCCACTTTCCAGGGCAAAAAGGGCCCAGGGTTATAATAAGTAAATAAC TTGTCTGTAAAAAAAAAAAAAAAAAAAAAAAA

223/2825 FIGURE 201

MTQLFLWEYGDLHLFGPNQRPAPCYDPCEAVLVESIPEGLDFPNASTGNPSTSQAWLGLLAGAHSSLDIASFYWT LTNNDTHTQEPSAQQGEEVLRQLQTLAPKGVNVRIAVSKPSGPQPQADLQALLQSGAQVRMVDMQKLTHGVLHTK FWVVDQTHFYLGSANMDWRSLTQVKELGVVMYNCSCLARDLTKIFEAYWFLGQAGSSIPSTWPRFYDTRYNQETP MEICLNGTPALAYLASAPPPLCPSGRTPDLKALLNVVDNARSFIYVAVMNYLPTLEFSHPHRFWPAIDDGLRRAT YERGVKVRLLISCWGHSEPSMRAFLLSLAALRDNHTHSDIQVKLFVVPADEAQARIPYARVNHNKYMVTERATYI GTSNWSGNYFTETAGTSLLVTQNGRGGLRSQLEAIFLRDWDSPYIHDLDTSADSVGNACRLL

FIGURE 202

CGCCTCCACGGCGATCAGGTTAGTGTGCGCCGCGGGTGCTGGGGGCCTCGAGAACCGAGCGGAGCTGGTTGAGCCT GAGAGAGCGCGAGAGATGGAGATGGGCAGACGGATTCATTTAGAGCTGCGGAACAGGACGCCCTCTGATGTGAAA GAACTTGTCCTGGACAACAGTCGGTCGAATGAAGGCAAACTCGAAGGCCTCACAGATGAATTTGAAGAACTGGAA CTAAGCGATAACAGAGTCTCAGGGGGCCTGGAAGTATTGGCAGAAAAGTGTCCGAACCTCACGCATCTAAATTTA AGTGGCAACAAAATTAAAGACCTCAGCACAATAGAGCCACTGAAAAAGTTAGAAAACCTCAAGAGCTTAGACCTT TTCAATTGCGAGGTAACCAACCTGAACGACTACCGAGAAAATGTGTTCAAGCTCCTCCCGCAACTCACATATCTC GACGGCTATGACCGGGACGACGAGGAGGCCCCTGACTCGGATGCTGAGGGCCTACGTGGAGGGCCTGGATGATGAG GAGGAGGATGAGGAGGAGGAGTATGATGAAGATGCTCAGGTAGTGGAAGACGAGGAGGACGAGGATGAGGAG GAGGAAGGTGAAGAGGACGACGTGAGTGGAGATGACGAGGAGGATGAAGAAGGTTATAACGATGGAGAGGTAGAT GACGAGGAAGATGAAGAAGACTTGGTGAAGAAGAAGGAGGTCAGAAGCGAAAACGAGAACCTGAAGATGAGGGA GAAGATGATGAC**TAA**GTGGAATAACCTATTTTGAAAAATTCCTATTGTGATTTGACTGTTTTTACCCATATCCCC CTTTATTTTTTCCCCTACTTTTTCTTTGTGTCCGGTTTTTGTCCCTGTAAATGCGATAGCTAAGTACACACTAA GTGAGCATTTGTTCCTGACTCTCAAAGAGGATGGTTTGGAGTTCTCTTACGTTTCCTGGTATTTCCCAAGTCTCT TGGGTTGGTTGGAAGGCTGTGGCTGGTCTCAGTTTGGTTACTCAATGCCCAGGAGGGGCTGAGCACCAGCCATAT CTTTTGCTTTGGTTCACATGATGATACCTGCTTTTCTCAGGCCTGCTAGAGGCATCCAACGCCCTGGTTTGTAAA TAGCAACCTAAAGGCGTATTTTGGCACTGGTCTGGGGACATTCCCCATCTCTCATCCCTTTTCCCCCTTCACAGA TGGTGGTGGGCTTCGCTCTACAAAGAGGACTCTGATGTTACTCTTGAGCTTATGAGCCAGAGAGCTGAAAACCGC AGGCTTGTTGTGTTAAGTTACAAGGAAAATGGATTTGGTAATTAAAATTAGAAGAACACACCTTCAAACTTCAA CTTCTTTAAAAGAAAAAAAACTGTCCTATCTTGTTCTGTAAAATATTAGAACGCTTTGTTTTACAAAAAATGA TGAGAGAATTCTTCCACATGTACTTCTGTGCTTAGAACATTTTTACGGACCTAAGCGCTGGAGACGTTGCTGCAT GTCGGCTGGGTTTTTTTTTCATACACCCGAGCACGGAAAAACTAACGCAAAATTGTATTTTCTTACCTAGTGGA AATCTGAAATGACTGCAAATTCCTAGTGAATGTACAGGTTTGCTTTCGTGTCCCTCTTCTGGTTGCTTTAGAAGT GACGTGTAATTTCTGAACCCATGTTTCATCTGTATAAAAGAACATCTGCACCAGTTTTTCTCCTGCCCCTCAGAA GAGCCAAACTTTGAGTTTTATGTCTGTTTGTCATTGATAAATTTCAATAAATCTTTTTATACAATTTTTTTGGGG ATGGCTTCTTTGAGTCCAACAGGCCATTGATCTTTTCAAGATGCATTCCAGATGAACTGCTAGGTGAGGGGGAAG GGTCTTAAAGCAAGACTCAGTGGTGTATCTTCATTAAAAGCTTCCTTTAAAAAAGTTACAGAGTTACTAAAAAAA CAAGTACCCAAACAATCAAGTTGGGCCAACCTTGGAACCTTGTTTTGAATATCTTTCATTGTTTTGTTCGTA TTGTAAAAAGAATGTATGGTTGAAAACTCAGGAATGTTTATAAAACAAATTATTTCACAAACCCAAAAAA

225/2825 FIGURE 203

ASTAIRLVCAAGAGGSRTERSWLSLQSPKNARPWVRGLLIEFRRRGSLCRERAREMEMGRRIHLELRNRTPSDVK ELVLDNSRSNEGKLEGLTDEFEELEFLSTINVGLTSIANLPKLNKLKKLELSDNRVSGGLEVLAEKCPNLTHLNL SGNKIKDLSTIEPLKKLENLKSLDLFNCEVTNLNDYRENVFKLLPQLTYLDGYDRDDKEAPDSDAEGYVEGLDDE EEDEDEEEYDEDAQVVEDEEDEEEEGEEEDVSGDDEEDEEGYNDGEVDDEEDEEELGEEERGQKRKREPEDEG EDDD

226/2825 FIGURE 204

CAACTACAAGCAAACAGCACAATTAATGCAACATTCAGCAACTCCAGACCAGCTTTTCTTACCCCCATGAAGAAC $\tt TGTCCCAACAACAGCAAAGCCACCCTCCTGCTTCTTCCAGGATTGCTCTTTAAAGGGACCAGAGTGACATA$ CTGATGCCTGGGGAATAAAGGTGGAGCGTGTGGAAATTAAGGATGTGAAACTACCTGTGCAGCTCCAGAGAGCTA GGGCTCTGAAAGAAGCCTCCATGGTCATCACTGAATCTCCTGCAGCCCTTCAGCTCCGATACCTGCAGACACTGA CCACCATTGCTGCTGAGAAAAACTCAACAATTGTCTTCCCTCTGCCCATAGATATGCTGCAAGGAATCATAGGGG CAAAACACAGCCATCTAGGCTAGTGTAGAGATGAGCGCTAGCCTTCCAAGCATGAAGTCGGGGACCAAATTAGCC TTTAACTCATAAAGAGAGGGTAGGGCTTTTCTTTTTCCATATGTCAATTGTGGTGTTCCCAGAATGTATAGCAGT TATAAAAATAGGTGAAAGAATTGTTAGCTTGTAAATACTGAGAGATTGGTGATTTATATAAGGTAATCTGTTAGT CTTAAAATAGTTAAAAGTTTGTATTTTTAGATTATTATGTAGTTAGATCCCTCTTGTTTTTGACTTCCACTG ACTCATTCTGAACCCCCTAAGCACCCAGGCCAGAGGCAAGAACCTGGGCTGTAACTGCCACCTGACACCGCTGAC TGGCTAAATGCTTTGCAGAAAGTGATGACCTTACACCACAACCAGCTTCTCCAGGTCATATGTGCCTTACCTCCA GAGAGTCTTTTTTTTTTTTTTCTGAGATGGAGTTTCACTCTTGTTGCCCAGGCTGGAGTGCAATAGCATGATCT CGGCTCACTGCAACCTCCGCCTCCTGGGTTCAAGAGATTCTCCTGCCTCAGCCTCCCCAGTAGCTGGGATTACAG ACCGTGTTTCAGAATAATCCTTACTTGAGAGTAGCCATTTTCTTGCCTGTACTTGTCAGAACTAGAGGAAATAGC CAAGACTAATGAAAAAGATTACTCTAACCCTTAAAAGACTTTTAAATTCACTACTAGAGTGGTCATTTTAAAAAT ACATCCATGTTTTAACTTATTTGAGCCTTCTTTATGAGTAAATGATTCCTCCTTGTTCTGTCTTTCAAACCAGCT AAATATTTGTCACAAAAGTGCTTTTTCTCACTGTTGCCTATTTTCATATATCAGGTTTTAAATAGTTTTAATTT

227/2825 FIGURE 205

 $\texttt{CCATTGTGCTCTAAAGGGAAGGTGCTGTAATCATTAAGGAGCGGAGGCTTTTGGAGCTGCTAAA \textbf{ATG} \texttt{CCGGAT}$ TACCTCGGTGCCGATCAGCGGAAGACCAAAGAGGATGAGAAGGACGACAAGCCCATCCGAGCTCTGGATGAGGGG CAACTTCTCAAGAAATTAATGAGCTCACTGGTATTAAAGAATCTGACACTGGCCTGGCCCCACCAGCACTCTGG GATTTGGCTGCAGATAAGCAGACACTCCAGAGTGAACAGCCTTTACAGGTTGCCAGGTGTACAAAGATAATCAAT GCTGATTCGGAGGACCCAAAATACATTATCAACGTAAAGCAGTTTGCCAAGTTTGTGGTGGACCTTAGTGATCAG $\verb|CCTCCTAAGATTGACCCAACAGTTACCATGATGCAGGTGGAAGAGAAACCTGATGTCACATACAGTGATGTTGGT|\\$ GGCTGTAAGGAACAGATTGAGAAACTGCGAGAGTTGAAACCCCATTACTTCATCCAGAGAGGTTTGTGAAC CTTGGCATTGAGCCTCCCAAGGGCGTGCTGCTCTTTGGTCCACCCGGTACAGGCAAGACACTCTGTGCGCGGGCA GTTGCTAATCGGACTGATGCGTGCTTCATTCGAGTTATTGGATCTGAGCTTGTACAGAAATACGTCGGTGAGGGG GCTATTGGAGGGGCTCGTTTTGATGATGGTGCTGGAGGTGACAATGAAGTGCAGAGAACAATGTTGGAACTGATC AATCAGCTTGATGGTTTTGATCCTCGAGGCAATATTAAAGTGCTGATGGCCACTAACAGACCTGATACTTTGGAT CCAGCACTGATGAGGCCAGGGAGATTGGATAGAAAAATTGAATTTAGCTTGCCCGATCTAGAGGGTCGGACCCAC ATATTTAAGATTCACGCTCGTTCAATGAGTGTTGAAAGAGATATCAGATTTGAACTGTTAGCACGACTGTGTCCA AATAGCACTGGTGCTGAGATTAGAAGCGTCTGCACAGAGGCTGGTATGTTTGCCATCAGAGCACGGCGAAAAATT GCTACCGAGAAGGATTTCTTGGAAGCTGTAAATAAGGTCATTAAGTCTTATGCCAAATTCAGTGCTACTCCTCGT TACATGACATACAAC TGA ACCCTGAAGGCTTTCAAGTGAAAACTTTAAATTGGAATCCTAACCTTATATAGACTTGTTAATAACCAATTCATAAACAAATAAATGGCTTCAACTTTAGAGCACAATGG

228/2825 FIGURE 206

MPDYLGADQRKTKEDEKDDKPIRALDEGDIALLKTYGQSTYSRQIKQVEDDIQQLLKKINELTGIKESDTGLAPP ALWDLAADKQTLQSEQPLQVARCTKIINADSEDPKYIINVKQFAKFVVDLSDQVAPTDIEEGMRVGVDRNKYQIH IPLPPKIDPTVTMMQVEEKPDVTYSDVGGCKEQIEKLREVVETPLLHPERFVNLGIEPPKGVLLFGPPGTGKTLC ARAVANRTDACFIRVIGSELVQKYVGEGARMVRELFEMARTKKACLIFFDEIDAIGGARFDDGAGGDNEVQRTML ELINQLDGFDPRGNIKVLMATNRPDTLDPALMRPGRLDRKIEFSLPDLEGRTHIFKIHARSMSVERDIRFELLAR LCPNSTGAEIRSVCTEAGMFAIRARRKIATEKDFLEAVNKVIKSYAKFSATPRYMTYN

FIGURE 207

CCGCGCCAGTCGCCTAGCAGGTCCTCTACCGGCTTATTCCTGTGCCGGATCTTCATCGGCACAGGGGCCCACTGAG ACGTTTCTGCCTCCTCTTTCTTCCTCCGCTCTTTCTCTCCCTCTCGTTTAGTTTGCCTGGAGCTTGAAAGGAG AAAGCACGGGGTCGCCCAAACCCCTTCTGCTTCTGCCCATCACAAGTGCCACTACCGCC**ATG**GGCCTCACTATC TCCTCCCTCTTCTCCCGACTATTTGGCAAGAAGCAGATGCGCATTTTGATGGTTGGATTGGATGCTGCTGGCAAG ACAACCATTCTGTATAAACTGAAGTTAGGGGAGATAGTCACCACCATTCCTACCATTGGTTTTAATGTGGAAACA GTAGAATATAAGAACATTTGTTTCACAGTATGGGATGTTGGTGGTCAAGATAGAATTAGGCCTCTCTGGAAGCAT TACTTCCAGAATACCCAGGGTCTTATTTTTGTGGTAGATAGCAACGATCGTGAAAGAATTCAGGAAGTAGCAGAT CCAAATGCTATGGCCATCAGTGAAATGACAGATAAACTAGGGCTTCAGTCTCTTCGTAACAGAACATGGTATGTT CAAGCCACTTGTGCAACACAAGGAACTGGTCTGTATGAAGGACTTGACTGGCTGTCAAATGAGCTTTCAAAACGT **TAA**ATGAAATTGGATATCTAACCAAGGACATGTTTGATAAAATTGGTCTAGGCTTGTTACAACAAAATTAGTTTG TATCTTGGTTATTAAACAGTATCTGGGACTGGTTTGGGCAGAATATTAAACTTATTTTTGTTGCCAATTATTGTTT ACCGAGTATAATGTTGCTATTTAGCAATGTGCTTGGTTTTAAAGAAATTCTCCTTGGGAAAAAAGTATCCTCTTT TGAGCCCCAGACAATAATGTTTTAAAGTTATCCCTTGCTACTTTACTGATACCTTTATCATTCCTGAGACAGTT TGCTAATTTAAAAATGTAGCATTCCATTTGTATTTATTTCTCTCCCTTGCCAAAAAGATTTTCTAATACTGCTTG TACCAGCCAGAGAAAGATCCAAAACACTACTCAGCTCTCTTGCACTGAGGAAATTTTTTCCCCCTACATTGACTCC TGGCCTACATCAGCCAAACTTAACCTTGGTGGGGTTTGGATTTGATAGCCAATTAGTTCTGTGCTGGTTGCAAAG AATTGATATTTAGATGGTTTTTAATACTCAGCAGATTGTCTTCCCATATTGTGTCTTTTTTATGTTGCATGTTGC TTTTGTTATCAGCCTGATTTTTTGCTCAGTATATGATAGTTCTGCTGATGTTTTGTTTATTGGGCAGACATATCT TCATTAAGAGTTTTTGGAAAACTCATCAAATTCGATGAATACATTTTCTTCATAACCCATTTGGAATTATTCCTA ATAAAATGATAAAATACGTAAAAAAAAAGGAATTC

230/2825 FIGURE 208

 ${\tt MGLTISSLFSRLFGKKQMRILMVGLDAAGKTTILYKLKLGEIVTTIPTIGFNVETVEYKNICFTVWDVGGQDRIR} \\ {\tt PLWKHYFQNTQGLIFVVDSNDRERIQEVADELQKMLLVDELRDAVLLLFANKQDLPNAMAISEMTDKLGLQSLRN} \\ {\tt RTWYVQATCATQGTGLYEGLDWLSNELSKR} \\ \\$

FIGURE 209

AAGAAGGGGAAGAAGATCAAAACCCACCATGCCCCAGGCTCAACAGCGTGCTGATGGAAGTGGAAGAGCCTGAAG TCTTGCAGGACTCACTGGATAGATGTTATTCGACTCCATCAATGTACTTTGAACTACCTGACTCATTCCAGCACT ACAGAAGTGTGTTTTACTCATTTGAGGAACAGCACATCACCTTTGCCCTTGACATGGACAATAGCTTTTTACTT TGACGGTGACAAGTCTTCACCTGGTCTTCCAGATGGGAGTCATATTCCCACAATAAGCAGCCCTTACTAAGCCGA AGACATAGGATGGGTCAGTGGGCATGGCTCTATTCCTATTCTCAGAGCATGCCAGTGGCAACCTGTGCTCAGTCT GAAGACAATGGACCCACGTTAGGTGTGACACGTTCACATAACTGTGCAGCACATGCCGGGAGTGATCAGCCGGAC ATTTTAATTTGAACCATGTATCTCTGGGTAGCTACAAAATTCCTCAGGGATTTCATTTTGCAGGCATGTCTCTGA GCTTCTATACCTACTCAAGGTCAGTGTCATCTTTGTGTTTAGTTCATCCAAAGGTGTTACCCTGGTTTCAATGAA CCTAACCTCATTATTTGTGTCTTCAGTGTTGGCTTGTTTTAGCTGATCCATCTGTAACACAGGAGGGATCCTTGG $\verb|CTGAGGATTGTATTTCAGAACCACCAACTGCTCTTGACAATTGTTAACCCACTAGGCTCCTTTGGTTAGAGAAGC| \\$ CACAGTCCTTCAGCCTCCAATTGGTGTCAGTACTTAGGAAGACCACAGCTAGATGGACAAACAGCATTGGGAGGC $\verb|CTTAGCCCTGCTCCTCTAATTCCATCCTGTAGAGAACAGGAGTCAGGAGCCGCTGGCAGGAGACAGCATGTCAC| \\$ CCAGGACTCTGCCGGTGCAGAATATGAGCAATGCCATGTTCTTGCAGAAAACGCTTAGCCTGAGTTTCATAGGAG GTAATCACCAGACAACTGCAGAGTGTGGAACACTGAGCAGGACAACTGACCTGTCTCCTTCACATAGTCCATGTC ACCACAAATCACACAAAAAAGGAGAGAGAGATATTTTGGGTTGAAAAAAAGTAAAAAGATAATGTAGCTGCATT $\verb|TCTTTAGTTGTTTTGAACCCCAAATATTTCCTCATCTTTTTGTTGTTGTTGATGGTGGTGACATGGACTTGT|\\$ TTATAGAGGACAGGTCAGCTCTCTGGCTCGGTGATCTACATTCTGAAGTTGTCTGAAAATGTCTTCATGATTAAA TTCAGCCTAAACTTTTTGCTGGGAACACTGCAGAGACAATGCTGTGAGTTTCCAACCTCAGCCCATCTGCGGGCA GAGAAGGTCTAGTTTGTCCATCACCATTATGATATCAGGACTGGTTACTTGGTTAAGGAGGGGTCTAGGAGATCT GTCCCTTTTAGAGACACCTTACTTATAATGAAGTACTTGGGAAAGCGGTTTTCAAGAGTATAAATATCCTGTATT ACATTCTCTGCCTGAGTTTTAATTTTTGTCCAAAGTTAATTTTAATCTATACAATTAAAACCTTTTGCCTATCAA AAAAAAAAAAAAAAA

232/2825 FIGURE 210A

CTGAGGAGCTCAGGCAATATAAAGTCCTGGTTCACGCTCAGGAACGAGAGCTGACCCAGTTAAGGGAGAAGTTGC GGGAAGGGAGATGCCTCCCGCTCATTGAATGAGCATCTCCAGGCCCTCCTCACTCCGGATGAGCCGGACAAGT CCCAGGGGCAGGACCTCCAAGAACAGCTGGCTGAGGGGTGTAGACTGGCACAGCACCTTGTCCAAAAGCTCAGCC CAGAAAATGACAACGATGACGATGAAGATGTTCAAGTTGAGGTGGCTGAGAAAGTGCAGAAATCGTCTGCCCCCA GGGAGATGCAGAAGGCTGAAGAAAAGGAAGTCCCTGAGGACTCACTGGAGGAATGTGCCATCACTTGTTCAAATA GCCATGGCCCTTATGACTCCAACCAGCCACATAGGAAAACCAAAATCACATTTGAGGAAGACAAAGTCGACTCAA CTCTCATTGGCTCATCCTCTCATGTTGAATGGGAGGATGCTGTACACATTATTCCAGAAAATGAAAGTGATGATG AGGAAGAGAAAAAAGGACCAGTGTCTCCCAGGAATCTGCAGGAGTCTGAAGAGGAGGAAGTCCCCCAGGAGT CCTGGGATGAAGGTTATTCGACTCTCTCAATTCCTCCTGAAATGTTGGCCTCGTACAAGTCTTACAGCAGCACAT AGGACCACGAGGCAACAGGTCCCAGGCTCAGCAGAGAGCTGCTGGATGAGAAAGGGCCTGAAGTCTTGCAGGACT TTTACGTATTGGAGCAACAGCGTGTTGGCTTGGCTGTTAACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAG AAGACCAAGACCCATCATGCCCCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAGAGCCTGAAGTCTTGCAGGACT CACTGGGTAGATGTTATTCGACTCCTTCAGGTTATCTTGAACTGCCTGACTTAGGCCAGCCCTACAGCAGTGCTG TTTACTCATTGGAGGAACAGTACCTTGGCTTGGCTCTTGACGTGGACAGAATTAAAAAGGACCAAGAAGAGGAAG AAGACCAAGGCCCACCATGCCCCAGGCTCAGCAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGCAGGACT CACTGGATAGATGTTATTCAACTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTATGGAAGTTCCT TTTATGCATTGGAGGAAAAGCATGTTGGCTTTTCTCTTGACGTGGGAGAAATTGAAAAGAAGGGGAAGGGGAAGA GCCCCAGGCTCAGCAGGAGCTGCTGGATGAGAAAGGGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATT AGCGTGTTGGCTTGTTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGACCAAGACCCATCAT GCCCCAGGCTCAGCGGGGAGCTGTTGGATGAGAAAGAGCCTGAAGTCTTGCAGGAGTCACTGGATAGATGCTATT CAACTCCTTCAGGTTGTCTTGAACTGACTGACTCATGCCAGCCCTACAGAAGTGCCTTTTACATATTGGAGCAAC AGCGTGTTGGCTTGGCTGTTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGACCAAGACCCATCAT GCCCCAGGCTCAGCAGGAGCTGCTGGATGAGAAAGAGCCTGAAGTCTTGCAGGACTCACTGGGTAGATGTTATT CGACTCCTTCAGGTTATCTTGAACTGCCTGACTTAGGCCAGCCCTACAGCAGTGCTGTTTACTCATTGGAGGAAC GCCCCAGGCTCAGCAGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATT CAACTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTATGGAAGTTCCTTTTATGCATTGGAGGAAA TGCTGATGGAAGTGGAAGACCTGAAGTCTTGCAGGACTCACTGGATATATGTTATTCGACTCCGTCAATGTACT TTGAACTACCTGACTCATTCCAGCACTACAGAAGTGTGTTTTACTCATTTGAGGAAGAGCATATCAGCTTCGCCC TTTACGTGGACAATAGGTTTTTTACTTTGACGGTGACAAGTCTCCACCTGGTGTTCCAGATGGGAGTCATATTCC TGAAAGTACAGTTCCATTTGGAAGCCCAGACATAGGATGGGTCAGTGGGCATGGCTCTATTCCTATTCTCAAACC ATGCCAGTGGCAACCTGTGCTCAGTCTGAAGACAATGGACCCACGTTAGGTGTGACACGTTCACATAACTGTGCA GCACATGCCGGGAGTGATCAGTCAGACATTTTAATTTGAACCACGTATCTCTGGGTAGCTACAAAATTCCTCAGG CATCTGTAACACAGGAGGGATCCTTGGCTGAGGATTGTATTTCAGAACCACCAACTGCTCTTGACAATTGTTAAC CCGCTAGGCTCCTTTGGTTAGAGAAGCCACAGTCCTTCAGCCTCCAATTGGTGTCAGTACTTAGGAAGACCACAG CTAGATGGACAAACAGCATTGGGAGGCCTTAGCCCTGCTCCTCTCAATTCCATCCTGTAGAGAACAGGAGTCAGG AGCCGCTGGCAGGAGACAGCATGTCACCCAGGACTCTGCCGGTGCAGAATATGAGCAATGCCATGTTCTTGCAGA AAACGCTTAACCTGAGTTTCATAGGAGGTAATCACCAGACAACTGCAGAATGTAGAACACTGAGCAGGACAACTG

233/2825 FIGURE 210B

234/2825 FIGURE 211

MLRNERQFKEEKLAEQLKQAEELRQYKVLVHAQERELTQLREKLREGRDASRSLNEHLQALLTPDEPDKSQGQDL QEQLAEGCRLAQHLVQKLSPENDNDDDEDVQVEVAEKVQKSSAPREMQKAEEKEVPEDSLEECAITCSNSHGPYD SNQPHRKTKITFEEDKVDSTLIGSSSHVEWEDAVHIIPENESDDEEEEEKGPVSPRNLQESEEEEVPQESWDEGY STLSIPPEMLASYKSYSSTFHSLEEQQVCMAVDIGRHRWDQVKKEDHEATGPRLSRELLDEKGPEVLQDSLDRCY STPSGCLELTDSCQPYRSAFYVLEQQRVGLAVNMDEIEKYQEVEEDQDPSCPRLSRELLDEKEPEVLQDSLGRCY STPSGYLELPDLGQPYSSAVYSLEEQYLGLALDVDRIKKDQEEEEDQGPPCPRLSRELLEVVEPEVLQDSLDRCY STPSSCLEQPDSCQPYGSSFYALEEKHVGFSLDVGEIEKKGKGKKRRGRRSKKERRGRKEGEEDQNPPCPRLSR ELLDEKGPEVLQDSLDRCYSTPSGCLELTDSCQPYRSAFYILEQQRVGLAVDMDEIEKYQEVEEDQDPSCPRLSG ELLDEKEPEVLQESLDRCYSTPSGCLELTDSCQPYRSAFYILEQQRVGLAVDMDEIEKYQEVEEDQDPSCPRLSR ELLDEKEPEVLQDSLGRCYSTPSGCLELTDSCQPYRSAFYILEQQRVGLAVDMDEIEKYQEVEEDQDPSCPRLSR ELLDEKEPEVLQDSLGRCYSTPSGYLELPDLGQPYSSAVYSLEEQYLGLALDVDRIKKDQEEEEDQGPPCPRLSR ELLEVVEPEVLQDSLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKHVGFSLDVGEIEKKGKGKKRRGRRSKKERR RGRKEGEEDQNPPCPRLNSMLMEVEEPEVLQDSLDICYSTPSMYFELPDSFQHYRSVFYSFEEEHISFALYVDNR FFTLTVTSLHLVFOMGVIFPO

235/2825 FIGURE 212

236/2825 FIGURE 213

MSLGRLCRLLKPALLCGALAAPGLAGTMCASRDDWRCARSMHEFSAKDIDGHMVNLDKYRGFVCIVTNVASQXGK TEVNYTQLVDLHARYAECGLRILAFPCNQFGKQEPGSNEEIKEFAAGYNVKFDMFSKICVNGDDAHPLWKWMKIQ PKGKGILGNAIKWNFTKFLIDKNGCVVKRYGPMEEPLVIEKDLPHYF

237/2825 FIGURE 214

GCCGCCATGGCCCAAGCTGACATCGCGCTGATCGGATTGGCCGTCATGGGCCAGAACTTAATTCTGAACATGAAT GACCACGGCTTTGTGGTCTGTGCTTTTAATAGGACTGTCTCCAAAGTTGACGATTTCTTGGCCAATGAGGCAAAG GGAACCAAAGTGGTGGGTGCCCAGTCCCTGAAAGAGATGGTCTCCAAGCTGAAGAAGCCCCGGCGGATCATCCTC CTGGTGAAGGCTGGGCAAGCTGTGGATGATTTCATCGAGAAATTGGTACCATTGTTGGATACTGGTGACATCATC ATTGACGGAGGAAATTCTGAATATAGGGACACCACAAGACGGTGCCGAGACCTCAAAGGCAAGGGAATTTTATTT GTGGGGAGCGGAGTCAGTGGTGGAGAGGGAAGGGCCCCGGTATGGCCCATCGCTCATGCCAGGAGGGAACAAAGAA GCGTGGCCCCACATCAAGACCATCTTCCAAGGCATTGCTGCAAAAGTGGGAACTGGAGAACCCTGCTGTGACTGG GTGGGAGATGAGGGAGCCACTTTGTGAAGATGGTGCACAACGGGATAGAGTATGGGGACATGCAGCTGATC TGTGAGGCATACCACCTGATGAAAGACGTGCTGGGCATGGCGCAGGACGAGATGGCCCAGGCCTTTGAGGATTGG AATAAGACAGAGCTAGACTCATTCCTGATTGAAATCACAGCCAATATTCTCAAGTTCCAAGACACCGATGGCAAA TACGGCGTACCCGTCACCCTCATTGGAGAAGCTGTCTTTGCTCGGTGCTTATCATCTCTGAAGGATGAGAAATT CAAGCTAGCAAAAAGCTGAAGGGTCCCCAGAAGTTCCAGTTTGATGGTGATAAGAAATCATTCCTGGAGGACATT $\tt TTTGGCTGGACTCTCAATTATGGTGGCATCGCCCTGATGTGGAGAGGGGGCTGCATCATTAGAAGTGTATTCCTA$ GGAAAGATAAAGGATGCATTTGATCGAAACCCGGAACTTCAGAACCTCCTACTGGACGACTTCTTTAAGTCAGCT GTTGAAAACTGCCAGGACTCCTGGCGGCGGGCAGTCAGCACTGGGGTCCAGGCTGGCATTCCCATGCCCTGTTTT TACTTCGGGGCTCACACCTATGAACTCTTGGCCAAACCAGGGCAGTTTATCCACACCAACTGGACAGGCCATGGT $\tt GGCACCGTGTCATCCTCGTCATACAATGCC\underline{TGA} TGGGCTCCTGTCACCCTCCACGTCTCCACAGACCAGGACATT$ CCATGTGCCTCATGGCACTGCCACCTGGGCCTTTGG

238/2825 FIGURE 215

MAQADIALIGLAVMGQNLILNMNDHGFVVCAFNRTVSKVDDFLANEAKGTKVVGAQSLKEMVSKLKKPRRIILLV KAGQAVDDFIEKLVPLLDTGDIIIDGGNSEYRDTTRRCRDLKGKGILFVGSGVSGGEEGPRYGPSLMPGGNKEAW PHIKTIFQGIAAKVGTGEPCCDWVGDEGAGHFVKMVHNGIEYGDMQLICEAYHLMKDVLGMAQDEMAQAFEDWNK TELDSFLIEITANILKFQDTDGKHLLPKIRDSAGQKGTGKWTAISALEYGVPVTLIGEAVFARCLSSLKDERIQA SKKLKGPQKFQFDGDKKSFLEDIRKALYASKIISYAQGFMLLRQAATEFGWTLNYGGIALMWRGGCIIRSVFLGK IKDAFDRNPELQNLLLDDFFKSAVENCQDSWRRAVSTGVQAGIPMPCFTTALSFYDGYRHEMLPASLIQAQRDYF GAHTYELLAKPGQFIHTNWTGHGGTVSSSSYNA

239/2825 FIGURE 216

GGCACGAGGGCGGAGCCAGCCCTCCCCTACCCGGAGCAGCCCGCTGGGGCCGTCCCGAGCGCGACACACTAGG AGTCCCGGCCGGCCAGCCAGGCCGCGGTCCCGGGACTCGGCCGTGAGTGCTGCGGGACGGATGGTGGCGGC GGGGCGCGGGCCAGCCGGGCGCCGTGAGCCGGAGCTGCGCGCGGGGCATGCGGCTGCGGCCCCCGGCCCTCGGC $\texttt{CCCACC} \underline{\textbf{ATG}} \texttt{CCGCGGGGCCCCGCTGTACGCCTGCCTCCTGGGGCTCTGCGCGCTCCTGCCCCGGCTCGCA}$ GGTCTCAACATATGCACTAGTGGAAGTGCCACCTCATGTGAAGAATGTCTGCTAATCCACCCAAAATGTGCCTGG TGCTCCAAAGAGGACTTCGGAAGCCCACGGTCCATCACCTCTCGGTGTGATCTGAGGGCAAACCTTGTCAAAAAT GGCTGTGGAGGTGAGATAGAGAGCCCAGCCAGCAGCTTCCATGTCCTGAGGAGCCTGCCCCTCAGCAGCAAGGGT TCGGGCTCTGCAGGCTGGACGTCATTCAGATGACACCACAGGAGATTGCCGTGAACCTCCGGCCCGGTGACAAG ACCACCTTCCAGCTACAGGTTCGCCAGGTGGAGGACTATCCTGTGGACCTGTACTACCTGATGGACCTCTCCCTG TCCATGAAGGATGACTTGGACAATATCCGGAGCCTGGGCACCAAACTCGCGGAGGAGATGAGGAAGCTCACCAGC AACTTCCGGTTGGGATTTGGGTCTTTTGTTGATAAGGACATCTCTCCTTTCTCCTACACGGCACCGAGGTACCAG ACCAATCCGTGCATTGGTTACAAGTTGTTTCCAAATTGCGTCCCTCCTTTGGGTTCCGCCATCTGCTGCCTCTC ACAGACAGAGTGGACAGCTTCAATGAGGAAGTTCGGAAACAGAGGGTGTCCCGGAACCGAGATGCCCCTGAGGGG GAGAAATTGGCAGAGAACAACATCAACCTCATCTTTGCAGTGACAAAAAACCATTATATGCTGTACAAGAATTTT ACAGCCCTGATACCTGGAACAACGGTGGAGATTTTAGATGGAGACTCCAAAAATATTATTCAACTGATTATTAAT GCATACAATAGTATCCGGTCTAAAGTGGAGTTGTCAGTCTGGGATCAGCCTGAGGATCTTAATCTCTTTTACT GCTACCTGCCAAGATGGGGTATCCTATCCTGGTCAGAGGAAGTGTGAGGGTCTGAAGATTGGGGACACGGCATCT TTTGAAGTATCATTGGAGGCCCGAAGCTGTCCCAGCAGACACACGGAGCATGTGTTTGCCCTGCGGCCGGTGGGA TTCCGGGACAGCCTGGAGGTGGGGGTCACCTACAACTGCACGTGCGGCTGCAGCGTGGGGCTGGAACCCAACAGT GCCAGGTGCAACGGGAGCGGACCTATGTCTGCGGCCTGTGTGAGTGCAGCCCCGGCTACCTGGGCACCAGGTGC GAGTGCCAGGATGGGGAGAACCAGAGCGTGTACCAGAACCTGTGCCGGGAGGCAGAGGGCAAGCCACTGTGCAGC GGGCGTGGGGACTGCAACCAGTGCTCCTGCTTCGAGAGCGAGTTCGGCAAGATCTATGGGCCTTTCTGT GAGTGCGACAACTTCTCCTGTGCCAGGAACAAGGGAGTCCTCTGCTCAGGCCATGGCGAGTGTCACTGCGGGGAA GGCCAGATCTGCAGCGAGCGTGGGCACTGTCTCTGTGGGCAGTGCCAATGCACGGAGCCGGGGGCCTTTGGGGAG ATGTGTGAGAAGTGCCCCACCTGCCCGGATGCATGCAGCACCAAGAGAGATTGCGTCGAGTGCCTGCTGCTCAC TCTGGGAAACCTGACAACCAGACCTGCCACAGCCTATGCAGGGATGAGGTGATCACATGGGTGGACACCATCGTG AAAGATGACCAGGAGGCTGTGCTATGTTTCTACAAAACCGCCAAGGACTGCGTCATGATGTTCACCTATGTGGAG CTCCCCAGTGGGAAGTCCAACCTGACCGTCCTCAGGGAGCCAGAGTGTGGAAACACCCCCAACGCCATGACCATC CTCCTGGCTGTGGTCGGTAGCATCCTCCTTGTTGGGCTTGCACTCCTGGCTATCTGGAAGCTGCTTGTCACCATC CACGACCGGAGGGAGTTTGCAAAGTTTCAGAGCGAGCGATCCAGGGCCCGCTATGAAATGGCTTCAAATCCATTA TACAGAAAGCCTATCTCCACGCACACTGTGGACTTCACCTTCAACAAGTTCAACAAATCCTACAATGGCACTGTG GAC**TGA**TGTTTCCTTCTCCGAGGGGCTGGAGCGGGGATCTGATGAAAAGGTCAGACTGAAACGCCTTGCACGGCT GCTCGGCTTGATCACAGCTCCCTAGGTAGGCACCACAGAGAAGACCTTCTAGTGAGCCTGGGCCAGGAGCCCACA GTGCCTGTACAGGAAGGTGCCTGGCCATGTCACCTGGCTAGGCCAGAGCCATGCCAGGCTGCGTCCCTCCGA GCTTGGGATAAAGCAAGGGGACCTTGGCACTCTCAGCTTTCCCTGCCACATCCAGCTTGTTGTCCCAATGAAATA CTGAGATGCTGGGCTGTCTCCCCTTCCAGGAATGCTGGGCCCCAGCCTGGCCAGACAAGACGACTGTCAGGAA GGGTCGGAGTCTGTAAAACCAGCATACAGTTTGGCTTTTTTCACATTGATCATTTTTATATGAAATAAAAAGATC TACTTTTATAATGAAAAGAACCAAGATTGTTTGGGATTGGAAGTAAAGATTAAAACCAAAAGAATTTGTGTTTGT CTGATAAAAAAAAAAAAAAAAAA

240/2825 FIGURE 217

MPRAPAPLYACLLGLCALLPRLAGLNICTSGSATSCEECLLIHPKCAWCSKEDFGSPRSITSRCDLRANLVKNGC
GGEIESPASSFHVLRSLPLSSKGSGSAGWDVIQMTPQEIAVNLRPGDKTTFQLQVRQVEDYPVDLYYLMDLSLSM
KDDLDNIRSLGTKLAEEMRKLTSNFRLGFGSFVDKDISPFSYAAPRYQTNPCIGYKLFPNCVPSFGFRHLLPLTD
RVDSFNEEVRKQRVSRNRDAPEGGFDAVLQAAVCKEKIGWRKDALHLLVFTTDDVPHIALDGKLGGLVQPHDGQC
HLNEANEYTASNQMDYPSLALLGEKLAENNINLIFAVTKNHYMLYKNFTALIPGTTVEILDGDSKNIIQLIINAY
NSIRSKVELSVWDQPEDLNLFFTATCQDGVSYPGQRKCEGLKIGDTASFEVSLEARSCPSRHTEHVFALRPVGFR
DSLEVGVTYNCTCGCSVGLEPNSARCNGSGTYVCGLCECSPGYLGTRCECQDGENQSVYQNLCREAEGKPLCSGR
GDCSCNQCSCFESEFGKIYGPFCECDNFSCARNKGVLCSGHGECHCGECKCHAGYIGDNCNCSTDISTCRGRDGQ
ICSERGHCLCGQCQCTEPGAFGEMCEKCPTCPDACSTKRDCVECLLLHSGKPDNQTCHSLCRDEVITWVDTIVKD
DQEAVLCFYKTAKDCVMMFTYVELPSGKSNLTVLREPECGNTPNAMTILLAVVGSILLVGLALLAIWKLLVTIHD
RREFAKFQSERSRARYEMASNPLYRKPISTHTVDFTFNKSYNGTVD

241/2825 FIGURE 218

 $\verb|CCGCCCTGCGTGTCCTGCCCCCGCGGCCCGCTGAGGCCCCCGGTTCGCTGTCCCGCCTGGCGTCCCT|\\$ TCGCCTCGGGTGCTAACTTTGAGTACATCGTCGCAGAAAAAAGAGGGGAAGAATAACACCGTGGGGTTGATCCAAC TGAACCGCCCCAAGGCCCTCAATGCACTTTGCGATGGCCTGATTGACGAGCTCAACCAGGCCCTGAAGATCTTCG AGGAGGACCCGGCCGTGGGGGCCATTGTCCTCACCGGCGGGGATAAGGCCTTTGCAGCTGGAGCTGATATCAAGG AAATGCAGAACCTGAGTTTCCAGGACTGTTACTCCAGCAAGTTCTTGAAGCACTGGGACCACCTCACCCAGGTCA AGAAGCCAGTCATCGCTGCTGTCAATGGCTATGCCTTTGGCGGGGGCTGTGAGCTTGCCATGATGTGTGATATCA TCTATGCCGGTGAGAAGGCCCAGTTTGCACAGCCGGAGATCTTAATAGGAACCATCCCAGGTGCGGGCGCCACCC AGAGACTCACCCGTGCTGTTGGGAAGTCGCTGGCGATGGAGATGGTCCTCACCGGTGACCGGATCTCAGCCCAGG ACGCCAAGCAAGCACGTCTTGTCAGCAAGATTTGTCCTGTTGAGACACTGGTGGAAGAAGCCATCCAGTGTGCAG AAAAAATTGCCAGCAATTCTAAAATTGTAGTAGCGATGGCCAAAGAATCAGTGAATGCAGCTTTTGAAATGACAT TAACAGAAGGAAGTAAGTTGGAGAAGAAACTCTTTTATTCAACCTTTGCCACTGATGACCGGAAAGAAGGGGATGA CCGCGTTTGTGGAAAAGAGAAAGGCCAACTTCAAAGACCAG**TGA**GAACCAGCTGCCCTGCTTCACACCTCTGCT $\tt TGGAGAGGACAAGTGCAGCCTGTCAGTTTTAGAAGCAAGTAAATCATCCTCTTTTCAAGAGCAGTGTCCGTGGTG$ TGCAGTTCCTCTCCAATTGCTGCGTGGTCGTGGCCCGACCTCTCACGGCATGACAGCCTTCGTCACCCAGCCTGT GAGGGTCCTGACTGGAGCACCTTCTAAATCTAAGATTCTGCTGAGGAGCCCCCGCTGGTCCCTCTGGGCATGCTG TGCTCGGACGGAAAGCGGGGCCTGCGGGTCCTTGTGTCCCTGCCGCTGAAGAATGGGGCTGCTCTGAGGGAAACG CTGTCTGCTGCCTTCATACAGATGCTGATTAAAGTGATAGCGATTCAGATT

242/2825 FIGURE 219

MAALRVLLSCARGPLRPPVRCPAWRPFASGANFEYIIAEKRGKNNTVGLIQLNRPKALNALCDGLIDELNQALKI FEEDPAVGAIVLTGGDKAFAAGADIKEMQNLSFQDCYSSKFLKHWDHLTQVKKPVIAAVNGYAFGGGCELAMMCD IIYAGEKAQFAQPEILIGTIPGAGGTQRLTRAVGKSLAMEMVLTGDRISAQDAKQAGLVSKICPVETLVEEAIQC AEKIASNSKIVVAMAKESVNAAFEMTLTEGSKLEKKLFYSTFATDDRKEGMTAFVEKRKANFKDQ

243/2825 FIGURE 220

CAGATGCCAGAAGAACACTGTTGCTCTTGGTGGACGGGCCCAGAGGAATTCAGAGTTAAACCTTGAGTGCCTGCG ${\tt TCCGTGAGAATTCAGC} \underline{\textbf{ATG}} \texttt{GAATGTCTCTACTATTTCCTGGGATTTCTGCTCCTGGCTGCAAGATTGCCACTTGA}$ TGGCTGGTCTTCTGATGAAAATGACTGGAATGAAAAACTCTACCCAGTGTGGAAGCGGGGAGACATGAGGTGGAA AAACTCCTGGAAGGGAGGCCGTGTGCAGGCGGTCCTGACCAGTGACTCACCAGCCCTCGTGGGCTCAAATATAAC ATTTGCGGTGAACCTGATATTCCCTAGATGCCAAAAGGAAGATGCCAATGGCAACATAGTCTATGAGAAGAACTG CAGAAATGAGGCTGGTTTATCTGCTGATCCATATGTTTACAACTGGACAGCATGGTCAGAGGACAGTGACGGGGA AAATGGCACCGGCCAAAGCCATCATAACGTCTTCCCTGATGGGAAACCTTTTCCTCACCACCCCGGATGGAGAAG ATGGAATTTCATCTACGTCTTCCACACACTTGGTCAGTATTTCCAGAAATTGGGACGATGTTCAGTGAGAGTTTC TGTGAACACAGCCAATGTGACACTTGGGCCTCAACTCATGGAAGTGACTGTCTACAGAAGACATGGACGGGCATA TGTTCCCATCGCACAAGTGAAAGATGTGTACGTGGTAACAGATCAGATTCCTGTGTTTGTGACTATGTTCCAGAA GAACGATCGAAATTCATCCGACGAAACCTTCCTCAAAGATCTCCCCCATTATGTTTGATGTCCTGATTCATGATCC CAATCATACTGTGAATCACACGTATGTGCTCAATGGAACCTTCAGCCTTAACCTCACTGTGAAAGCTGCAGCACC CCCCCTGGAGCTGAGGATTCCTGATGAAAACTGCCAGATTAACAGATATGGCCACTTTCAAGCCACCATCAC AATTGTAGAGGGAATCTTAGAGGTTAACATCATCCAGATGACAGACGTCCTGATGCCGGTGCCATGGCCTGAAAG CTCCCTAATAGACTTTGTCGTGACCTGCCAAGGGAGCATTCCCACGGAGGTCTGTACCATCATTTCTGACCCCAC CTGCGAGATCACCCAGAACACAGTCTGCAGCCCTGTGGATGTGGATGAGATGTGTCTGCTGACTGTGAGACGAAC CTTCAATGGGTCTGGGACGTACTGTGTGAACCTCACCCTGGGGGATGACACAAGCCTGGCTCTCACGAGCACCCT GATTTCTGTTCCTGACAGAGACCCAGCCTCGCCTTTAAGGATGGCAAACAGTGCCCTGATCTCCGTTGGCTGCTT GGCCATATTTGTCACTGTGATCTCCCTCTTGGTGTACAAAAAACACAAGGAATACAACCCAATAGAAAATAGTCC TGGGAATGTGGTCAGAAGCCAAAGGCCTGAGTGTCTTTCTCAACCGTGCAAAAGCCGTGTTCTTCCCGGGAAACCA $\mathsf{GGAAAA}\mathsf{GGATCCGCTACTCAAAAACCAAGAATTTAAAGGAGTTTCT{\color{red} \mathbf{TAA}}\mathsf{ATTTCGACCTTGTTTCTGAAGCTCAC}$ TTTTCAGTGCCATTGATGTGAGATGTGCTGGAGTGGCTATTAACCTTTTTTTCCTAAAGATTATTGTTAAATAGA TATTGTGGTTTGGGGAAGTTGAATTTTTTATAGGTTAAATGTCATTTTAGAGATGGGGAGAGGGATTATACTGCA TTATAAAGTCTTAGGTAACTAGTAGGATAGAAACACTGTGTCCCGAGAGTAAGGAGAGAAGCTACTATTGATTAG AGCCTAACCCAGGTTAACTGCAAGAAGAGGGGGGATACTTTCAGCTTTCCATGTAACTGTATGCATAAAGCCAAT GTAGTCCAGTTTCTAAGATCATGTTCCAAGCTAACTGAATCCCACTTCAATACACACTCATGAACTCCTGATGGA ACAATAACAGGCCCAAGCCTGTGGTATGATGTGCACACTTGCTAGACTCAGAAAAAATACTACTCTCATAAATGG GTGGGAGTATTTTGGTGACAACCTACTTTGCTTGGCTGAGTGAAGGAATGATATTCATATATTCATTTATTCCAT GGACATTTAGTTAGTGCTTTTTATATACCAGGCATGATGCTGAGTGACACTCTTGTGTATATTTCCAAATTTTTG TATAGTCGCTGCACATATTTGAAATCATATTAAGACTTTCCAAAGATGAGGTCCCTGGTTTTTCATGGCAACT TGATCAGTAAGGATTTCACCTCTGTTTGTAACTAAAACCATCTACTATATGTTAGACATGACATTCTTTTTCTCT

244/2825 FIGURE 221

MECLYYFLGFLLLAARLPLDAAKRFHDVLGNERPSAYMREHNQLNGWSSDENDWNEKLYPVWKRGDMRWKNSWKG GRVQAVLTSDSPALVGSNITFAVNLIFPRCQKEDANGNIVYEKNCRNEAGLSADPYVYNWTAWSEDSDGENGTGQ SHHNVFPDGKPFPHHPGWRRWNFIYVFHTLGQYFQKLGRCSVRVSVNTANVTLGPQLMEVTVYRRHGRAYVPIAQ VKDVYVVTDQIPVFVTMFQKNDRNSSDETFLKDLPIMFDVLIHDPSHFLNYSTINYKWSFGDNTGLFVSTNHTVN HTYVLNGTFSLNLTVKAAAPGPCPPPPPPPRPSKPTPSLGPAGDNPLELSRIPDENCQINRYGHFQATITIVEGI LEVNIIQMTDVLMPVPWPESSLIDFVVTCQGSIPTEVCTIISDPTCEITQNTVCSPVDVDEMCLLTVRRTFNGSG TYCVNLTLGDDTSLALTSTLISVPDRDPASPLRMANSALISVGCLAIFVTVISLLVYKKHKEYNPIENSPGNVVR SKGLSVFLNRAKAVFFPGNQEKDPLLKNQEFKGVS

FIGURE 222

246/2825 FIGURE 223

MERPSLRALLLGAAGLLLLLPLSSSSSSDTCGPCEPASCPPLPPLGCLLGETRDACGCCPMCARGEGEPCGGGG AGRGYCAPGMECVKSRKRKGKAGAAAGGPGVSGVCVCKSRYPVCGSDGTTYPSGCQLRAASQRAESRGEKAITQ VSKGTCEQGPSIVTPPKDIWNVTGAQVYLSCEVIGIPTPVLIWNKVKRGHYGVQRTELLPGDRDNLAIQTRGGPE KHEVTGWVLVSPLSKEDAGEYECHASNSQGQASASAKITVVDALHEIPVKKGEGAEL

247/2825 FIGURE 224

GGACACCGGGCCATGCACGCCCCCAACTGAAGCTGCATCTCAAAGCCGAAGATTCCAGCAGCCCAGGGGATTTCA AAGAGCTCAGACTCAGAGGAACATCTGCGGAGAGACCCCCGAAGCCCTCTCCAGGGCAGTCCTCATCCAGACGCT ${\tt CCGCTAGTGCAGACAGGAGCGCGCAGTGGCCCCGGCTCGCCGCGCCCAGCGGATCCCCAGCGCGCAACCACC}$ CCCCGCCTGCCCAAAGCACCGGGACTGGAGCACGGAGACCTACCAGGGATGTACCCTGCCCACATGTACCA AGTGTACAAGTCAAGACGGGGAATAAAGCGGAGCGAGGACAGCAAGGAGACCTACAAATTGCCGCACCGGCTCAT CGAGAAAAAGAGACGTGACCGGATTAACGAGTGCATCGCCCAGCTGAAGGATCTCCTACCCGAACATCTCAAACT TACAACTTTGGGTCACTTGGAAAAAGCAGTGGTTCTTGAACTTACCTTGAAGCATGTGAAAGCACTAACAAACCT AATTGATCAGCAGCAGAAAATCATTGCCCTGCAGAGTGGTTTACAAGCTGGTGAGCTGTCAGGGAGAAATGT CGAAACAGGTCAAGAGATGTTCTGCTCAGGTTTCCAGACATGTGCCCGGGAGGTGCTTCAGTATCTGGCCAAGCA TGGTACCTCCAGGAAGCCATCAGACCCAGCTCCCAAAGTGATGGACTTCAAGGAAAAACCCAGCTCTCCGGCCAA AGGTTCGGAAGGTCCTGGGAAAAACTGCGTGCCAGTCATCCAGCGGACTTTCGCTCACTCGAGTGGGGAGCAGAG CGGCAGCGACACGGACAGACAGTGGCTATGGAGGAGAATCGGAGAAGGGCGACTTGCGCAGTGAGCAGCCGTG CTTCAAAAGTGACCACGGACGCAGGTTCACGATGGGAGAAAGGATCGGCGCAATTAAGCAAGAGTCCGAAGAACC CCCCACAAAAAAGAACCGGATGCAGCTTTCGGATGATGAAGGCCATTTCACTAGCAGTGACCTGATCAGCTCCCC CCTGCCCATGCTGGAGAAGTGCTGGTATCCCACCTCAGTGCCAGTGCTATACCCAGGCCTCAACGCCTCTGCCGC AGCCCTCTCTAGCTTCATGAACCCAGACAAGATCTCGGCTCCCTTGCTCATGCCCCAGAGACTCCCTTCTCCCTT GCCAGCTCATCCGTCCGTCGACTCTTCTGTCTTGCTCCAAGCTCTGAAGCCAATCCCCCCTTTAAACTTAGAAAC ${\tt CAAAGAC}$ ACTCTCTAGGGGATCCTGCTTTGCTTTCCTTCCTCGCTACTTCCTAAAAAGCAACAAAAAAG TTTTTGTGAATGCTGCAAGATTGTTGCATTGTGTATACTGAGATAATCTGAGGCATGGAGAGCAGATTCAGGGTG TGTGTGTGTGTGTGTGTGTGTATGTGCGTGCGTGCACATGTGTGCCTGCGTGTTGGTATAGGACTTT TCTGGGCTTTTCCCCACCCAGAGAATAGCCCCCTTCGATACACATCAGCTGGATTTTCAAAAGCTTCAAAGTCTT GGTCTGTGAGTCACTCTTCAGTTTGGGAGCTGGGTCTGTGGCTTTGATCAGAAGGTACTTTCAAAAGAGGGCTTT CCAGGGCTCAGCTCCCAACCAGCTGTTAGGACCCCACCCTTTTGCCTTTATTGTCGACGTGACTCACCAGACGTC GGGGAGAGAGCAGTCAGACCGAGCTTTCTGCTAACATGGGGAGGTAGCAGGCACTGGCATAGCACGGTAGTGG TTTGGGGAGGTTTCCGCAGGTCTGCTCCCCACCCCTGCCTCGGAAGAATAAAGAGAATGTAGTTCCCTACTCAGG TCTGAGAAATGCGGACACCCCGAGCGAGCACCCCAAAGTGCACAAAGCTGAGTAAAAAGCTGCCCCCTTCAAACA GAACTAGACTCAGTTTTCAATTCCATCCTAAAACTCCTTTTAACCAAGCTTAGCTTCTCAAAGGCCTAACCAAGC $\tt CTTGGCACCGCCAGATCCTTTCTGTAGGCTAATTCCTCTTGCCCAACGGCATATGGAGTGTCCTTATTGCTAAAA$ GCAGCAGCTTTTCAAGATGCACTATGCCTGATTGCTGATCGTGTTTTAACTTTTTCTTTTCCTGTTTTTATTTTG AATAATTTTTTTTTCTCTAGGGAGAGGTACAGTGTTTATATTTTGGAGCCTTCCTGAAGGTGTAAAATTGTAAAT ATTTTTATCTATGAGTAAATGTTAAGTAGTTGTTTTAAAATACTTAATAAAATAATTCTTTTCCTGTGGAAG

248/2825 FIGURE 225

MERIPSAQPPPACLPKAPGLEHGDLPGMYPAHMYQVYKSRRGIKRSEDSKETYKLPHRLIEKKRRDRINECIAQL KDLLPEHLKLTTLGHLEKAVVLELTLKHVKALTNLIDQQQQKIIALQSGLQAGELSGRNVETGQEMFCSGFQTCA REVLQYLAKHENTRDLKSSQLVTHLHRVVSELLQGGTSRKPSDPAPKVMDFKEKPSSPAKGSEGPGKNCVPVIQR TFAHSSGEQSGSDTDTDSGYGGESEKGDLRSEQPCFKSDHGRRFTMGERIGAIKQESEEPPTKKNRMQLSDDEGH FTSSDLISSPFLGPHPHQPPFCLPFYLIPPSATAYLPMLEKCWYPTSVPVLYPGLNASAAALSSFMNPDKISAPL LMPQRLPSPLPAHPSVDSSVLLQALKPIPPLNLETKD

249/2825 FIGURE 226

GGGGCGAGACCTACGACGCCGGCGAGCAGTGGCCGTTACGCCTAAAAAGA<u>ATG</u>GCGGTCTTGGCACCTCTAATTGC TCTCGTGTATTCGGTGCCGCGACTTTCACGATGGCTCGCCCAACCTTACTACCTTCTGTCGGCCCTGCTCTCTGC TGACTTTGACTGGAGAGAGTGGAGATCCTGATGTTTCTCAGTGCCATTGTGATGATGAAGAACCGCAGATCCAT CACTGTGGAGCAACATATAGGCAACATTTTCATGTTTAGTAAAGTGGCCAACACAATTCTTTTCTTCCGCTTGGA TATTCGCATGGGCCTACTTTACATCACACTCTGCATAGTGTTCCTGATGACGTGCAAACCCCCCTATATATGGG CCCTGAGTATATCAAGTACTTCAATGATAAAACCATTGATGAGGAACTAGAACGGGACAAGAGGGTCACTTGGAT CAACTGTACAGGGCTAAATTTTGGGAAGGTGGATGTTGGACGCTATACTGATGTTAGTACGCGGTACAAAGTGAG CACATCACCCCTCACCAAGCAACTCCCTACCCTGATCCTGTTCCAAGGTGGCAAGGAGGCAATGCGGCGGCCACA GATTGACAAGAAAGGACGGCTGTCTCATGGACCTTCTCTGAGGAGAATGTGATCCGAGAATTTAACTTAAATGA GCTATACCAGCGGGCCAAGAAACTATCAAAGGCTGGAGACAATATCCCTGAGGAGCAGCCTGTGGCTTCAACCCC CACCACAGTGTCAGATGGGGAAAACAAGAAGGATAAA**TAA**GATCCTCACTTTGGCAGTGCTTCCTCTCTGTCAA GGGCAGCATGCAGCTTCTGATTTTAAAGAGGCATCTAGGGAATTGTCAGGCACCCTACAGGAAGGCCTGCCATGC TTGTGGCCAACTGTTTCACTGGAGCAAAGAAGAGATCTCATAGGACGGAGGGGGAAAATGGTTTTCCCTCCAAG $\tt CTTGGGTCAGTGTTAACTGCTTATCAGCTATTCAGACATCTCCATGGTTTCTCCATGAAACTCTGTGGTTTCA$ TCATTCCTTCTTAGTTGACCTGCACAGCTTGGTTAGACCTAGATTTAACCCTAAGGTAAGATGCTGGGGTATAGA ACGCTAAGAATTTTCCCCCAAGGACTCTTGCTTCCTCAAGCCCTTCTGGCTTCGTTTATGGTCTTCATTAAAAGT ATAAGCCTAACTTTGTCGCTAGTCCTAAGGAGAAACCTTTAACCACAAAGTTTTTATCATTGAAGACAATATTGA ACAACCCCCTATTTTGTGGGGATTGAGAAGGGGTGAATAGAGGCTTGAGACTTTCCTTTGTGTGGTAGGACTTGG AGGAGAAATCCCCTGGACTTTCACTAACCCTCTGACATACTCCCCACACCCAGTTGATGGCTTTCCGTAATAAAA AGATTGGGATTTCCTTTTG

250/2825 FIGURE 227

 $\label{topic} MAVLAPLIALVYSVPRLSRWLAQPYYLLSALLSAAFLLVRKLPPLCHGLPTQREDGNPCDFDWREVEILMFLSAI\\ VMMKNRRSITVEQHIGNIFMFSKVANTILFFRLDIRMGLLYITLCIVFLMTCKPPLYMGPEYIKYFNDKTIDEEL\\ ERDKRVTWIVEFFANWSNDCQSFAPIYADLSLKYNCTGLNFGKVDVGRYTDVSTRYKVSTSPLTKQLPTLILFQG\\ GKEAMRRPQIDKKGRAVSWTFSEENVIREFNLNELYQRAKKLSKAGDNIPEEQPVASTPTTVSDGENKKDK$

251/2825 FIGURE 228

CTTCCTCGGGCCCTGGCCGGGGGCCACGCCGCGGCGAGAGAAGAACCAGCCCAAGCCGTCCCC GAAACGCGAGTCCGGAGAGGAGTTCCGCATGGAGAAGTTGAACCAGCTGTGGGAGAAGGCCCAGCGACTGCATCT TCCTCCCGTGAGGCTGGCCGAGCTCCACGCTGATCTGAAGATACAGGAGGGGACGAACTCGCCTGGAAGAAACT AAAGCTTGACGGCTTGGACGAAGATGGGGAGAAGGAAGCGAGACTCATACGCAACCTCAATGTCATCTTGGCCAA GTATGGTCTGGACGGAAAGAAGGACGCTCGGCAGGTGACCAGCAACTCCCTCAGTGGCACCCAGGAAGACGGGCT GGATGACCCCAGGCTGGAAAAGCTGTGGCACAAGGCGAAGACCTCTGGGAAAATTCTCCGGCGAAGAACTGGACAA GCTCTGGCGGGAGTTCCTGCATCACAAAGAGAAAGTTCACGAGTACAACGTCCTGCTGGAGACCCTGAGCAGGAC CGAAGAAATCCACGAGAACGTCATTAGCCCCTCGGACCTGAGCGACATCAAGGGCAGCGTCCTGCACAGCAGGCA CACGGAGCTGAAGGAGAAGCTGCGCAGCATCAACCAGGGCCTGGACCGCCTGCGCAGGGTCAGCCACCAGGGCTA CAGCACTGAGGCTGAGTTCGAGGAGCCCAGGGTGATTGACCTGTGGGGACCTGGCGCAGTCCGCCAACCTCACGGA CAAGGAGCTGGAGGCGTTCCGGGAGGAGCTCAAGCACTTCGAAGCCAAAATCGAGAAGCACAACCACTACCAGAA GCAGCTGGAGATTGCGCACGAGAAGCTGAGGCACGCAGAGAGCGTGGGCGACGGCGAGCGTGTGAGCCGCAGCCG CGAGAAGCACGCCCTGCTGGAGGGGCGGACCAAGGAGCTGGGCTACACGGTGAAGAAGCATCTGCAGGACCTGTC ${\tt CGGCAGGATCTCCAGAGCTCGGCACAACGAACTC}$ CGTGAAGGACCTGGGCTCTTGGCCGTGGCATTTCCGTGGACAGCCCGCCGTCAGGGTGGCTGGGGCTGGCACGGG TGTCGAGGCAGGAAGGATTGTTTCTGGTGACTGCAGCCGCTGCCGTCGCGACACAGGGCTTGGTGGTAGCAT $\tt TTGGGTCTGAGATCGGCCCAGCTCTGACTGAAGGGGGCTTGGCTTCCACTCAGCATCAGCGTGGCAGTCACCACCC$ CAGTGAGGACCTCGATGTCCAGCTGTCAGGTCTGATAGTCCTCTGCTAAAACAACACGATTTACATAAAAAA TCTTACACATCTGCCACCGGAAATACCATGCACAGAGTCCTTAAAAAAATAGAGTGCAGTATTTAAACC

252/2825 FIGURE 229

MAPRRVRSFLRGLPALLLLLLFLGPWPAASHGGKYSREKNQPKPSPKRESGEEFRMEKLNQLWEKAQRLHLPPVR LAELHADLKIQERDELAWKKLKLDGLDEDGEKEARLIRNLNVILAKYGLDGKKDARQVTSNSLSGTQEDGLDDPR LEKLWHKAKTSGKFSGEELDKLWREFLHHKEKVHEYNVLLETLSRTEEIHENVISPSDLSDIKGSVLHSRHTELK EKLRSINQGLDRLRRVSHQGYSTEAEFEEPRVIDLWDLAQSANLTDKELEAFREELKHFEAKIEKHNHYQKQLEI AHEKLRHAESVGDGERVSRSREKHALLEGRTKELGYTVKKHLQDLSGRISRARHNEL

253/2825 FIGURE 230

CGCGGCCGCGTCGGACCTGTGGTCCCGGGTTTCTGCAGAGTCTACTTCAGAAGCGGAGGCACTGGGAGTCCGGTT TGGGATTGCCAGGCTGTGGTTGTGAGTCTGAGCTTGTGAGCGCCCCCAACTCTTCGCCAGCATATCA TCCCGGCAGGCGATAAACTACATTCAGTTGAGTCTGCAAGACTGGGAGGAACTGGGGTGATAAGAAATCTATTCA ${ t CTGTCAAGGTTTATTGAAGTCAAAATCAAGTGGCGGTTCTGTGGTAGAGATGCAAGGAGATGAA}$ ATGACACGAATCATTTGGGAATTGATTAAAGAGAAACTCATTTTTCCCTACGTGGAATTGGATCTACATAGCTAT GATTTAGGCATAGAGAATCGTGATGCCACCAACGACCAAGTCACCAAGGATGCTGCAGAAGCTATAAAGAAGCAT AATGTTGGCGTCAAATGTGCCACTATCACTCCTGATGAGAAGAGGGGTTGAGGAGTTCAAGTTGAAACAAATGTGG AAATCACCAAATGGCACCATACGAAATATTCTGGGTGGCACGGTCTTCAGAGAAGCCATTATCTGCAAAAATATC CCCCGGCTTGTGAGTGGATGGGTAAAACCTATCATCATAGGTCGTCATGCTTATGGGGGATCAATACAGAGCAACT GATTTTGTTGTTCCTGGGCCTGGAAAAGTAGAGATAACCTACACACCAAGTGACGGAACCCAAAAGGTGACATAC $\tt CTGGTACATAACTTTGAAGAAGGTGGTGTTGCCATGGGGATGTATAATCAAGATAAGTCAATTGAAGATTTT$ GCACACAGTTCCTTCCAGATGGCTCTGTCTAAGGGTTGGCCTTTGTATCTGAGCACCAAAAACACTATTCTGAAG ATATATGATGGGCGTTTTAAAGACATCTTTCAGGAGATATATGACAAGCAGTACAAGTCCCAGTTTGAAGCTCAA GCCTGTAAAAACTATGATGGTGACGTGCAGTCGGACTCTGTGGCCCAAGGGTATGGCTCTCTCGGCATGATGACC AGCGTGCTGGTTTGTCCAGATGGCAAGACAGTAGAAGCAGAGGCTGCCCACGGGACTGTAACCCGTCACTACCGC ATGTACCAGAAAGGACAGGACGTCCACCAACCTCATTGCTTCCATTTTTGCCTGGACCAGAGGGTTAGCCCAC AGAGCAAAGCTTGATAACAATAAAGAGCTTGCCTTCTTTGCAAATGCTTTGGAAGAAGTCTCTATTGAGACAATT GAGGCTGGCTTCATGACCAAGGACTTGGCTGCTTGCATTAGAGGTTTACCCAATGTGCAACGTTCTGACTACTTG AATACATTTGAGTTCATGGATAAACTTGGAGAAAACTTGAAGATCAAACTAGCTCAGGCCAAACTT**TAA**GTTCAT ACCTGAGCTAAGAAGGATAATTGTCTTTTGGTAACTAGGTCTACAGGTTTACATTTTTCTGTGTTACACTCAAGG ATAAAGGCAAAATCAATTTTGTAATTTGTTTAGAAGCCAGAGTTTATCTTTTCTATAAGTTTACAGCCTTTTTCT TATATATACAGTTATTGCCACCTTTGTGAACATGGCAAGGGACTTTTTTACAATTTTTATTTTATTTTCTAGTAC CAGCCTAGGAATTCGGTTAGTACTCATTTGTATTCACTGTCACTTTTTCTCATGTTCTAATTATAAATGACCAAA ATCAAGATTGCTCAAAAGGGTAAATGATAGCCACAGTATTGCTCCCTAAAATATGCATAAAGTAGAAATTCACTG TGTGCATTAAACTTGCACATGACTGGAACGAAGTATGAGTGCAACTCAAATGTGTTGAAGATACTGCAGTCATTT TTGTAAAGACCTTGCTGAATGTTTCCAATAGACTAAATACTGTTTAGGCCGCAGGAGAGTTTGGAATCCGGAATA AATACTACCTGGAGTCTTGTCCTCCATTTTTCTCTCTTCTCCTCGGCCTGGCCTGAATATTATACTACTCTA AATAGCATATTTCATCCAAGTGCAATAATGTAAGCTGAATCTTTTTTTGGACTTCTGCTGGCCTGTTTTATTTCTT AATTAAGTGCTAATTACCAAAAAAAAAAA

254/2825 FIGURE 231

MSKKISGGSVVEMQGDEMTRIIWELIKEKLIFPYVELDLHSYDLGIENRDATNDQVTKDAAEAIKKHNVGVKCAT ITPDEKRVEEFKLKQMWKSPNGTIRNILGGTVFREAIICKNIPRLVSGWVKPIIIGRHAYGDQYRATDFVVPGPG KVEITYTPSDGTQKVTYLVHNFEEGGGVAMGMYNQDKSIEDFAHSSFQMALSKGWPLYLSTKNTILKIYDGRFKD IFQEIYDKQYKSQFEAQKIWYEHRLIDDMVAQAMKSEGGFIWACKNYDGDVQSDSVAQGYGSLGMMTSVLVCPDG KTVEAEAAHGTVTRHYRMYQKGQETSTNLIASIFAWTRGLAHRAKLDNNKELAFFANALEEVSIETIEAGFMTKD LAACIRGLPNVQRSDYLNTFEFMDKLGENLKIKLAQAKL

255/2825 FIGURE 232

256/2825 FIGURE 233

 ${\tt MALAVRVVYCGAXGYKSKYLQLKKKLEDEFPGRLDICGEGTPQATGFFEVMVAGKLIHSKKKGDGYVDTESKFLKLVAAIKAALAQG}$

257/2825 FIGURE 234A

GTCCTTTCACGCGTGTCTTCGTGTTGGTGCGCCTTTTCACTGGTCATAAAGTGCTGCTCACGGCCGTGAACTGCTA ${\tt CAGCGTGAAGGCCGCCACCCGGGTCCAGGATGCTTTTGCCGCCGCCAAGCTCCTGGCCCTGATCATCCT}$ GCTGGGCTTCGTCCAGATCGGGAAGGGTGATGTGTCCAATCTAGATCCCAAGTTCTCATTTGAAGGCACCAAACT GGATGTGGGGAACATTGTGCTGGCATTATACAGCGGCCTCTTTGCCTATGGAGGATGGAATTACTTGAATTTCGT ${\tt CACAGAGGAA} \underline{\textbf{ATG}} {\tt ATCAACCCCTACAGAAACCTGCCCCTGGCCATCATCATCTCCCTGCCCATCGTGACGCTGGT}$ GTACGTGCTGACCAACCTGGCCTACTTCACCACCCTGTCCACCGAGCAGATGCTGTCGTCCGAGGCCGTGGCCGT GGACTTCGGGAACTATCACCTGGGCGTCATGTCCTGGATCATCCCCGTCTTCGTGGGCCTGTCCTGCTTTGGCTC CGTCAATGGGTCCCTGTTCACATCCTCCAGGCTCTTCTTCGTGGGGTCCCGGGAAGGCCACCTGCCCTCCATCCT CTCCATGATCCACCCACAGCTCCTCACCCCCGTGCCGTCCCTCGTGTTCACGTGTGTGATGACGCTGCTCTACGC CTTCTCCAAGGACATCTTCTCCGTCATCAACTTCTTCAGCTTCTTCAACTGGCTCTGCGTGGCCCTGGCCATCAT $\tt CGGCATGATCTGGCTGCGCCACAGAAAGCCTGAGCTTGAGCGGCCCATCAAGGTGAACCTGGCCTGTGTT$ CTTCATCCTGGCCTGCCTCTTCCTGATCGCCGTCTCCTTCTGGAAGACACCCGTGGAGTGTGGCATCGGCTTCAC CATCATCCTCAGCGGGCTGCCCGTCTACTTCTTCGGGGTCTGGTGGAAAAACAAGCCCAAGTGGCTCCTCCAGGG GGCTGCCGGAGGAGCATGCGCAGAGGCCAGTTAAAGTAGATCACCTCCTCGAACCCACTCCGGTTCCCCGCAACC ${\tt CACAGCTCAGCTCCCAGTCCTCGCCGTCCCTCCCAGGTCGGGCAGTGGAGGCTGCTGTGAAAACTCTGG}$ TACGAATCTCATCCCTCAACTGAGGGCCAGGGACCCAGGTGTGCCTGTGCTCCTGCCCAGGAGCAGCTTTTGGTC AGACCCTGGGCAAACAGAGCTACTGAGACTTGGAACCTCATTGCTACCACAGACTTGCACTGAAGCCAGACAGCT TGCTTGAGGCCCCGATGGACTCCTGACCATAATCCTAGCCCCGAGACACCATCCTGAGCCAGGGAACAGCCCCAG GGTTGGGGGGTGCCGCCATCTCCCCTAGCTCACCAGGCCTGGCCTCTTGGCAGTGTGGCCTCTTGGCTATTTCTG TTCCAGTTTTGGAGGCTGAGTTCTGGTTCATGCAGACAAAGCCCTGTCCTTCAGTCTTCTAGAAACAGAGACAAG AAAGGCAGACACCGCGGCCAGGCACCCATGTGGGCCCCCACCCTGGGCTCCACACAGCAGTGTCCCCTGCCCC AGAGGTCGCAGCTCAGCCTCCAATGCATTGGCCTCTGTACCGCCCGGCAGCCCCTTCTGGCCGGTGCTGG GTTCCCACTCCCGGCCTAGGCACCTCCCCGCTCTCCCTGTCACGCTCATGTCCTGTCCTGGTCCTGATGCCCGTT GTCTAGGAGACAGAGCCAAGCACTGCTCACGTCTCTGCCGCCTGCGTTTGGAGGCCCCTGGGCTCTCACCCAGTC CCCACCGCCTGCAGAGAGGGAACTAGGGCACCCCTTGTTTCTGTTGTTCCCGTGAATTTTTTTCGCTATGGGAG GCAGCCGAGGCCTGGCCAATGCGGCCCACTTTCCTGAGCTGTCGCTGCCTCCATGGCAGCAGCCAAGGACCCCCA GAACAAGAAGACCCCCCCGCAGGATCCCTCCTGAGCTCGGGGGGCTCTGCCTTCTCAGGCCCCGGGCTTCCCTTC TCCCCAGCCAGAGGTGGAGCCAAGTGGTCCAGCGTCACTCCAGTGCTCAGCTGTGGCTGGAGGAGCTGGCCTGTG GCACAGCCCTGAGTGTCCCAAGCCGGGAGCCAACGAAGCCGGACACGGCTTCACTGACCAGCGGCTGCTCAAGCC GCAAGCTCTCAGCAAGTGCCCAGTGGAGCCTGCCGCCCCACCTGGGCACCGGGACCCCCTCACCATCCAGTGGG TTATTCACCCCTGCCCGTTGCTTCCCGCTGCACATGGACAGACTTCACAGCGTCTGCTCATAGGACCTGCATCC ACTGACTGTGTTGGGCAAGACCTCTTCCCTCTGGGCCTGTTCTCTTGGCTGCAAATAAGGACAGCTGGTGCC CCACCTGCCTGGTGCATTGCTGTGAATCCAGGAGGCAGTGGACATCGTAGGCAGCCACGGCCCCAGGTCCAGG ACCTTCCCGCCTCGGCTAGGGGTCCTCGGGATGCCGTTCTGTTCCAACCTCCTGTTCTGGGAGGTGGACATGCCT CAAGGATACAGGGAGCCGGCGCCTCTCGACGGCACGCACTTCCTGTTGGCTGCGGCGGCTGTGGGCCAGCATGG GGGCTGCCAGCGTCTGTTGTGGAAAGTAGCTGCTAGTGAAATGGCTGGGGCCGCTGGGGTCCGTCTTCACACTGC GCAGGTCTCTTCTGGGCGTCTGAGCTGGGGTGGGAGCTCCTCCGCAGAAGGTTGGTGGGGGGGTCCAGTCTGTGAT $\verb|CCTTGGTGCTGTGCCCCACTCCAGCCTGGGGACCCCACTTCAGAAGGTAGGGGCCGTGTCCCGCGGTGCTGAC| \\$ TGAGGCCTGCTTCCCCCTCCTGCTGTGCTGGAATTCCACAGGGACCAGGGCCACCGCAGGGGACTGTCT CAGAAGACTTGATTTTTCCGTCCCTTTTTCTCCACACTCCACTGACAAACGTCCCCAGCGGTTTCCACTTGTGGG

258/2825 FIGURE 234B

259/2825 FIGURE 235

MINPYRNLPLAIIISLPIVTLVYVLTNLAYFTTLSTEQMLSSEAVAVDFGNYHLGVMSWIIPVFVGLSCFGSVNG SLFTSSRLFFVGSREGHLPSILSMIHPQLLTPVPSLVFTCVMTLLYAFSKDIFSVINFFSFFNWLCVALAIIGMI WLRHRKPELERPIKVNLALPVFFILACLFLIAVSFWKTPVECGIGFTIILSGLPVYFFGVWWKNKPKWLLQGIFS TTVLCQKLMQVVPQET

260/2825 FIGURE 236

GCCCTGCTGGCGTCGACGCTGTTGGCGCTGCTCGTGTCGCCCGCGCGGGGTCGCGGGGGCCGGGACCACGGGGAC TCGCTCAGCGACGGGCCCCCGGGCGGGCGGCGGCGTGCCCTATTTCTACCTGAGCCCGCTGCAGCTCTCCGTG AGCAACCTGCAGGAGAATCCATATGCTACACTGACCATGACTTTTGGCACAGACCAACTTCTGCAAGAAACATGGA GATATTGCAAAGCATTCGTTATTCATTCGACACCCTGAGATGAAAACCTGGCCTTCCAGCCATAATTGGTTCTTT GCTAAGTTGAATATAACCAATATCTGGGTCCTGGACTACTTTGGTGGACCAAAAATCGTGACACAGAAGAATAT ${\tt TATAATGTCACAGTTCAG} \textbf{TGA} \textbf{AGCAGCACTGTGGTGAATTTAGCAACACTTATGAAGTTTCTTAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAAGTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAAGTTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAAGTTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAAGTTGGCTCATAGAATTTAGCAACACTTATGAAGTTTCTTAAAAGTTGGCTCATAGAATTAGAATTAGAAGTTTCTTAAAAGTTGGCTAATAGAATTAGAAGTTTCTTAAAAGTTGGCTCATAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTAGAAGTTGTAGAATTA$ CACACTTAAAAGGCTTAATGTTTCTCTGGAAAGCGTCCCAGAATATTAGCCAGTTTTCTGTCACATGCTGGTTTG TTTGCTTGCTTGTTTACTTGCTTGTTTACCAATAGAGTTGACCTGTTATTGGATTTCCTGGAAGATGTGGTAGCT ACTTTTTCCTATTTTGAAGCCATTTTCGTAGAGAAATATCCTTCACTATAATCAAATAAGTTTTGTCCCATCAA TTCCAAAGATGTTTCCAGTGGTGCTCTTGAAGAGGAATGAGTACCAGTTTTAAATTGCCCATTGGCATTTGAAGG GAGCTGCCTGAGCCTGGTGCAAAAGGATTGGCCCCCATTATGGTGCTTCTGAATAAATCTTGCCAAGATAGACAA ACAATGATGAAACTCAGATGGAGCTTCCTACTCATGTTGATTTATGTCTCACAATCCTGGGTATTGTTAATTCAA CATAGGGTGAAACTATTTCTGATAAAGAACTTTTGAAAAACTTTTTATACTCTAAAGTGATACTCAGAACAAAAG AAAGTCATAAAACTCCTGAATTTAATTTCCCCACCTAAGTCGAGACAGTATTATCAAAACACATGTGCACACAGA TTATTTTTTGGCTCCAAAACTGGATTGCAAAAGAAGAAGAGAGAAGAATATTTTGTGTGTTCCTGGTATTCTTTTA TAAGTAAAGTTTACCCAGGCATGGACCAGCTTCAGCCAGGGACAAAATCCCCTCCCAAACCACTCTCCACAGCTT TTTAAAAATACTTCTACTCTTAACAATTACCTAAGGCTTCCTCAACTGCCCCAAATCTCTTAATAGCTTCTAGTG CACTAATATTATTACCCATATACATGATTTCAGAAGATGACATAAGATTCCTCTTAAAGAGGGAAATGTCAGGAAT CAAGCCACTGAATCCTTAAAGAGAAAAGTTGAATATGAGTCATTGTGTCTGAAAACTGCAAAGTGAACTTAACTG AGATCCAGCAAACAGGTTCTGTTTAAGAAAAATAATTTATACTAAATTTAGTAAAATGGACTTCTTATTCAAAGC

FIGURE 237

MAGLSRGSARALLAALLASTLLALLVSPARGRGGRDHGDWDEASRLPPLPPREDAARVARFVTHVSDWGALATIS TLEAVRGRPFADVLSLSDGPPGAGSGVPYFYLSPLQLSVSNLQENPYATLTMTLAQTNFCKKHGFDPQSPLCVHI MLSGTVTKVNETEMDIAKHSLFIRHPEMKTWPSSHNWFFAKLNITNIWVLDYFGGPKIVTPEEYYNVTVQ

FIGURE 238

263/2825 FIGURE 239

 ${\tt MMCGAPSATQPATAETQHIADQVRSQLEEKENKKFPVFKAVSFKSQVVAGTNYFIKVHVGDEDFVHLRVFQSLPH}\\ {\tt ENKPLTLSNYQTNKAKHDELTYF}$

FIGURE 240

 $\verb|CCTTCCCGCCTGCCTGTAGCGGCGTTGTTGCCACTCCGCCACCATGTTCGAGGCGCGCCTGGTCCAGGGCTCCAT| \\$ $\verb|CCTCAAGAAGGTGTTGGAGGCACTCAAGGACCTCATCAACGAGGCCTGCTGGGATATTAGCTCCAGCGGTGTAAA| \\$ $\verb|CCTGCAGAGCATGGACTCGTCCCACGTCTTTTGGTGCAGCTCACCCTGCGGTCTGAGGGCTTCGACACCTACCG| \\$ CTGCGACCGCAACCTGGCCATGGGCGTGAACCTCACCAGTATGTCCAAAATACTAAAATGCGCCGGCAATGAAGA TATCATTACACTAAGGGCCGAAGATAACGCGGATACCTTGGCGCTAGTATTTGAAGCACCAAACCAGGAGAAAGT AGTAAAGATGCCTTCTGGTGAATTTGCACGTATATGCCGAGATCTCAGCCATATTGGAGATGCTGTTGTAATTTC $\verb|CCTGAACTTCTTTACAAAAGCCACTCCACTCTTCAACGGTGACACTCAGTATGTCTGCAGATGTACCCCTTGT| \\$ TTAGGCATTCTTAAAATTCAAGAAAATAAAACTAAGCTCTTTGAGAACTGCTTCTAAGATGCCAGCATATACTGA AGTCTTTTCTGTCACCAAATTTGTACCTCTAAGTACATATGTAGATATTGTTTCTGTAAATAACCTATTTTTTT $\verb|TCTCTATTCTCCCAATTTGTTTAAAGAATAAAGTCCAAAGTCTGATCTGGTCTAGTTAACCTAGAAGTATTTTT| \\$ GTCTCTTAGAAATACTTGTGATTTTTATAATACAAAAGGGTCTTGACTCTAAATGCAGTTTTAAGAAGTGTTTTT GAATTTAAATAAAGTTACTTGAATTTCAAAC

265/2825 FIGURE 241

MFEARLVQGSILKKVLEALKDLINEACWDISSSGVNLQSMDSSHVSLVQLTLRSEGFDTYRCDRNLAMGVNLTSM SKILKCAGNEDIITLRAEDNADTLALVFEAPNQEKVSDYEMKLMDLDVEQLGIPEQEYSCVVKMPSGEFARICRD LSHIGDAVVISCAKDGVKFSASGELGNGNIKLSQTSNVDKEEEAVTIEMNEPVQLTFALRYLNFFTKATPLSSTV TLSMSADVPLVVEYKIADMGHLKYYLAPKIEDEEGS

FIGURE 242

267/2825 FIGURE 243A

CGATTAATCCTCCAGTTGGTTGTCCCTGCCGTCTCGGAAGGGTTAGCACACACCAGGTCTGTTTTTGATGTATG CAGGCATATAAATATTGGTCGTTCTCAGAGCTGGGATGCTGCTGGGTGGTACGAGGGCCCCTGGGAGAACGCCGA GTCCCTGCGGCCTCTGGGGAGAGAGCTCCCTGACGTATGGCACAGCAGAGGGGACTTGGTTTGAGCCAAACCA GCTGCCACGGGAGTACTACAGTGATCCGTCTGGAGCTGCTAGGGTACCCAAAGAGCCTCCCCTCTATCGGGACCC AGGAGTCAGCCGGCCGGTCCCCAGCTACGGAGTGCTTGGCAGCAGAACGTCATGGGATCCAATGCAAGGCCGGTC ACCTGCCCTGCAGGACGCCGGTCACCTGTACCGGGATCCTGGAGGTAAAATGATCCCTCAGGGGCGGCAGACACA GTGCCTGGTTGTGGACCCCAGTTCAGCTGCTGCCCCCGAAGGCAGCACAGGGGTGGCCCCAGGGGCCCTGAATCG TGGCTACGGGCCTGCCCGGGAAAGCATCCCATCCAAGATGGCTTACGAAGCTTACGAAGCTGACCTGTCCACCTT CACGCTGGGAGCCCTACTGCAGCAGGGCTTTGACTCCCCGGCCGTCCTGGCTACCCTGGAGGACGCGGATATCAA GTCTGTCGCACCCAACCTGGGCCAGGCCCGTGTTCTGAGCCGCCTGGCCAATAGCTGCAGGACCGAAATGCAGCT GCGGAGGCAGGACCGGGGGGCCCGCTGCCCCGGGCGCGGTCCAGCAGCTTCAGCCACCGAAGCGAACTGCTCCA TGGTGACTTGGCTTCTCTGGGCGCTGCGGCTCCTCTGCAGACAGCATCCCCCCGAGCTGGAGACCCGGCTCGCCG TCCCTCCAGCGCACCATCTCAGCACCTCCTGGAGACGGCAGCCACCTATTCTGCCCCTGGCGTGGGCACCCATGC CCCCTGCAGGCAGGGGTGGCCTTGACTAACCCGGGCCCCTCAAACCCCCTTCACCCAGGCCCCAGAACAGCTTA CTCCACGGCATACACGGTGCCCATGGAGCTGCTAAAGAGGGGAGCGCAACGTGGCCGCCTCTCCGCTGCCCAGCCC $\tt CCTCCACACGCCTCACTCACCGTACGAGAAGGTGGCCCGGCGCACAGGGGCACCCATCATCGTGTCCACCATGCT$ TGCACCAGAACCAAGTATCCGCCCCCAGATCATGAACGGCCCCCTGCACCCCCGCCCCCTGGTGGCGCTGCTGGA GCAGGAAATCCACGAGAAGGTTCTAAACGAAGCCGTGGGCGCCATGATGTACCACACCATCACCTTCAACAGGGA GGACCTGGAGAAGTTCAAGGCCCTGAGAGTGATCGTGCGGATAGGCAGTGGCTATGACAACGTGAACATCAAGGC TGCCGGCGAGCTCGGAATTGCCGTGTGCAACATCCCGTCTGCAGCCGTGGAAGAGACAGCGGACTCTACCATCTG GGAGCAGATCCGCGAGGTGGCCTCGGGAGCGGCCCGCATCCGTGGGGAGACGCTGGGCCTCATTGGCTTTGGTCG CACGGGGCAGGCGGTTGCAGTTCGAGCCAAGGCCTTTGGATTCAGCGTCATATTTTATGACCCCTACTTGCAGGA TGGGATCGAGCGGTCCCTGGGCGTGCAGAGGGTCTACACCCTGCAGGATTTGCTGTATCAGAGCGACTGCGTCTC CTTGCACTGCAATCTCAACGAACATAACCACCACCTCATCAATGACTTTACCATAAAGCAGATGAGGCAGGGAGC ATTCCTTGTGAACGCAGCCCGTGGCGGCCTGGTGGACGAGAAAGCCTTAGCACAAGCCCTCAAGGAGGGCAGGAT ACGAGGGGCAGCCCTCGACGTGCATGAGTCAGAGCCCTTCAGCTTTGCTCAGGGTCCGTTGAAAGATGCCCCGAA GATCCGCCGAGCCATCACAGGTCGCATCCCAGAAAGCTTAAGAAATTGTGTGAACAAGGAATTCTTTGTCACATC AGCGCCTTGGTCAGTAATAGACCAGCAAGCAATTCATCCTGAGCTCAATGGTGCCACATACAGATATCCGCCAGG ${\tt CATCGTGGGTGTGGCTCCAGGAGGACTTCCTGCAGCCATGGAAGGGATCATCCCTGGAGGCATCCCAGTGACTCA}$ CAACCTCCCGACAGTGGCACATCCTTCCCAAGCGCCCTCTCCCAACCAGCCCACAAAACACGGGGACAATCGAGA GCACCCCAACGAGCAA**TAG**CAGAGAATGCCAGAAGGTAATCACTCAGATACACTTGGGACCAAGAGACAGTGAAA AATAGATGAACTAAGAGAAAAAGAATCGGATGGTCTTTGTAACTGATTCTGGACATATGCATCATTGATGTTGCA GTGTTGAAACTACAAGAGCTAGAAAACTGAAGATGTCGTCTGCTTACGGAAGCGCTGAAAGACTAGGATGTGATT $\verb|CTTTTTCCTTTATCAGTCCCTTGGGCACAGCAGGTCCTGAACACCCTGCTCTACAATGTTGCATCAAGAGTTCAA| \\$ ACAACAAAATAAAAAATTTAAGAGGAAATCCCCATCCTGTGACTTGAGTCCCTTAAGTCTACAGGGGCTGGGTG ACCTCTTTTTGCTAATAGGAAAATCACATTACTACAAAATGGGGAAAAAACTGTTTGCCTGTGGTAGACACCTGC

268/2825 FIGURE 243B

269/2825 FIGURE **244**

MPVPSRHINIGRSQSWDAAGWYEGPWENAESLRPLGRRSSLTYGTAEGTWFEPNHRPQDAALPVAAEPYLYREAV
YNSVAARKGSTPDFTFYDSRQAVMSGRSPLLPREYYSDPSGAARVPKEPPLYRDPGVSRPVPSYGVLGSRTSWDP
MQGRSPALQDAGHLYRDPGGKMIPQGRQTQSRAASPGRYGREQPDTRYGAEVPAYPLSQVFSDISERPIDPAPAR
QVAPTCLVVDPSSAAAPEGSTGVAPGALNRGYGPARESIPSKMAYETYEADLSTFQGPGGKRTVLPEFLAFLRAE
GLAEATLGALLQQGFDSPAVLATLEDADIKSVAPNLGQARVLSRLANSCRTEMQLRRQDRGGPLPRARSSSFSHR
SELLHGDLASLGAAAPLQTASPRAGDPARRPSSAPSQHLLETAATYSAPGVGTHAPHFPSNSGYSSPTPCALTAR
LSPTHPLQAGVALTNPGPSNPLHPGPRTAYSTAYTVPMELLKRERNVAASPLPSPHGSPQVLRKPGAPLGPSTLP
PASQSLHTPHSPYEKVARRTGAPIIVSTMLAPEPSIRPQIMNGPLHPRPLVALLDGRDCTVEMPILKDLATVAFC
DAQSTQEIHEKVLNEAVGAMMYHTITFNREDLEKFKALRVIVRIGSGYDNVNIKAAGELGIAVCNIPSAAVEETA
DSTICHILNLYRRNTWLYQALREGTRVQSVEQIREVASGAARIRGETLGLIGFGRTGQAVAVRAKAFGFSVIFYD
PYLQDGIERSLGVQRVYTLQDLLYQSDCVSLHCNLNEHNHHLINDFTIKQMRQGAFLVNAARGGLVDEKALAQAL
KEGRIRGAALDVHESEPFSFAQGPLKDAPNLICTPHTAWYSEQASLEMREAAATEIRRAITGRIPESLRNCVNKE
FFVTSAPWSVIDQQAIHPELNGATYRYPPGIVGVAPGGLPAAMEGIIPGGIPVTHNLPTVAHPSQAPSPNQPTKH
GDNREHPNEQ

270/2825 FIGURE 245

271/2825 FIGURE 246

 $\label{thm:confidence} {\tt MAVARAGVLGVQWLQRASRNVMPLGARTASHMTKDMFPGPYPRTPEERAAAAKKYNMRVEDYEPYPDDGMGYGDY\\ {\tt PKLPDRSQHERDPWYSWDQPGLRLNWGEPMHWHLDMYNRNRVDTSPTPVSWHVMCMQLFGFLAFMIFMCWVGDVY\\ {\tt PVYQPVGPKQYPYNNLYLERGGDPSKEPERVVHYEI} \\ {\tt PVYQPVGPKQYPYNNLYLERGGDPSKEPPERVVHYEI} \\ {\tt PVYQPVGPKQYPYNNLYLERGGDPSKEPPERVVHYEIN PVYNNLYLERGGDPSKEPPERVVHYEIN PVYNNLYLERGGDPSKEPPERVVHYEI$

272/2825 FIGURE 247

GAATTCATGCTAAATTGCTGGAAGGCTGCGTCTCTGCTGTGGTGTCAGTTCCGGATGCCTCATCGCCAGGGGCGC GCCGCAGCCACCCTCCGGACCGCGGCAGCTGCTGACCCGCCATCGCC ATG GCCCGCGGGAAAGCCAAGGAGGAGGGCAGCTGGAAGAAATTCATCTGGAACTCAGAGAAGAAGAAGTTTCTGGGCAGGACCGGTGGCAGTTGGTTT CTCACCATCAGTGAATTTAAGCCCACATATCAGGACCGAGTGGCCCCGCCAGGATTAACACAGATTCCTCAGATC CAGAAGACTGAAATTTCCTTTCGTCCTAATGATCCCAAGAGCTATGAGGCATATGTACTGAACATAGTTAGGTTC CTGGAAAAGTACAAAGATTCAGCCCAGAGGGATGACATGATTTTTGAAGATTGTGGCGATGTGCCCAGTGAACCG AAAGAACGAGGAGACTTTAATCATGAACGAGGAGAGCGAAAGGTCTGCAGATTCAAGCTTGAATGGCTGGGAAAT TGCTCTGGATTAAATGATGAAACTTATGGCTACAAAGAGGGCAAACCGTGCATTATTATAAAGCTCAACCGAGTT CTAGGCTTCAAACCTAAGCCTCCCAAGAATGAGTCCTTGGAGACTTACCCAGTGATGAAGTATAACCCAAATGTC CTTCCCGTTCAGTGCACTGGCAAGCGAGATGAAGATAAGGATAAAGTTGGAAATGTGGAGTATTTTGGACTGGGC AACTCCCTGGTTTTCCTCTGCAGTATTATCCGTACTATGGCAAACTCCTGCAGCCCAAATACCTGCAGCCCCTG CTGGCCGTACAGTTCACCAATCTTACCATGGACACTGAAATTCGCATAGAGTGTAAGGCGTACGGTGAGAACATT GGGTACAGTGAGAAAGACCGTTTTCAGGGACGTTTTGATGTAAAAATTGAAGTTAAGAGC**TGA**TCACAAGCACAA ATCTTTCCCACTAGCCATTTAATAAGTTAAAAAAAGATACAAAAAACAAAAACCTACTAGTCTTGAACAAAACTGTC ATACGTATGGGACCTACACTTAATCTATATGCTTTACACTAGCTTTCTGCATTTAATAGGTTAGAATGTAAATTA AAGTGTAGCAATAGCAACAAAATATTTATTCTACTGTAAATGACAAAAGAAAAAGAAAAATTGAGCCTTGGGACG TGCCCATTTTTACTGTAAATTATGATTCCGTAACTGACCTTGTAGTAAGCAGTGTTTCTGGCCCCTAAGTATTGC TGCCTTGTGTATTTTATTTAGTGTACAGTACTACAGGTGCATACTCTGGTCATTTTTCAAGCCATGTTTTATTGT ATCTGTTTTCTACTTTATGTGAGCAAGGTTTGCTGTCCAAGGTGTAAATATTCAACGGGAATAAAACTGGCATGG ATACTCCATAGTCTTTTCCTGTGGTGTTAGGTCTTTATTTTTATTTTTTTCCTGGGGGCTGGGGTGGGGGTTTGT CATGGGGGAACTGCCCTTTAAATTTTAAGTGACACTACAGAAAAACACAAAAAGGTGATGGGTTGTTATGCTT GTATTGAATGCTGTCTTGACATCTCTTGCCTTGTCCTCCGGTATGTTCTAAAGCTGTGTCTGAGATCTGGATCTG $\tt TGGAGGCATCACATGCTGGTGCTGTGTCTTTATGAATGTTTTAACCATTTTCATGGTGGAAGAATTTTATATTTA$ TGCAGTTGTACAATTTTATTTTTTTCTGCAAGAAAAAGTGTAATGTATGAAATAAACCAAAGTCACTTGTTTGAA AATAAATCTTTATTTTGAACTTTATAAAAGCAATGCAGTACCCCATAGACTGGTGTTAAATGTTGTCTACAGTGC AAACAACGGACAATAAAAGAATGAACCGAATTC

273/2825 FIGURE 248

 $\label{thm:margkakeegswkkfiwnsekkeflgrtggswfkillfyvifygclagifigtiqvmlttisefkptyqdrvappgltqipqiqkteisfrpndpksyeayvlnivrflekykdsaqrddmifedcgdvpsepkergdfnhergerkvcrfklewlgncsglndetygykegkpciiiklnrvlgfkpkppknesletypvmkynpnvlpvqctgkrdedkdkvgnveyfglgnspgfplqyypyygkllqpkylqpllavqftnltmdteirieckaygenigysekdrfqgrfdvkievks$

274/2825 FIGURE 249

GCTTTGTTGCCTGAGTAACCGTATGATGGTGGTGGTGGTGTCTTCCTGTCTCAACGATACCTATTTTCTAGT GCTGAGATCCTGAGACAATGATCATAGTGAAAGATTCGTTTTCATTGCAGAGTGGTATGATCCAAATGCTTCAC TAGCCCTAATTAAACCAGATGCAATATCAAAGGCTGGAGAAATAATTGAAATAATAAACAAAGCTGGATTTACTA TAACCAAACTCAAAATGATGATGCTTTCAAGGAAAGAAGCATTGGATTTTCATGTAGATCACCAGTCAAGACCCT TTTTCAATGAGCTGATCCAGTTTATTACAACTGGTCCTATTATTGCCATGGAGATTTTAAGAGATGATGCTATAT TCTTTGGAACAGATGGCATAAGAAATGCAGCGCATGGCCCTGATTCTTTTGCTTCTGCGGCCAGAGAAATGGAGT TGTTTTTCCTTCAAGTGGAGGTTGTGGGCCGGCAAACACTGCTAAATTTACTAATTGTACCTGTTGCATTGTTA AACCCCATGCTGTCAGTGAAGGACTGTTGGGAAAGATCCTGATGGCTATCCGAGATGCAGGTTTTGAAATCTCAG CTATGCAGATGTTCAATATGGATCGGGTTAATGTTGAGGAATTCTATGAAGTTTATAAAGGAGTAGTGACCGAAT ATCATGACATGGTGACAGAAATGTATTCTGGCCCTTGTGTAGCAATGGAGATTCAACAGAATAATGCTACAAAGA ${\tt CATTTCGAGAATTTTGTGGACCTGCTGATCCTGAAATTGCCCGGCATTTACGCCCTGGAACTCTCAGAGCAATCT}$ $\verb|TTGGTAAAACTAAGATCCAGAATGCTGTTCACTGTACTGATCTGCCAGAGGATGGCCTATTAGAGGTTCAATACT|\\$ $\texttt{TCTTCAAGATCTTGGATAAT} \underline{\textbf{TAG}} \texttt{TGGTGTGGAAAGTAAAGAAGTCACAGGTTGGGACATTTAGACAAGAGTGAAT}$ TGTACTCCTGGCAATTATTACATATGTTAGAACATGGATTTTGCACTGTAGACAACATTTAACACCAGTCTATGG

275/2825 FIGURE 250

MNHSERFVFIAEWYDPNASLLRRYELLFYPGDGSVEMHDVKNHRTFLKRTKYDNLHLEDLFIGNKVNVFSRQLVL IDYGDQYTARQLGSRKEKTLALIKPDAISKAGEIIEIINKAGFTITKLKMMMLSRKEALDFHVDHQSRPFFNELI QFITTGPIIAMEILRDDAICEWKRLLGPANSGVARTDASESIRALFGTDGIRNAAHGPDSFASAAREMELFFPSS GGCGPANTAKFTNCTCCIVKPHAVSEGLLGKILMAIRDAGFEISAMQMFNMDRVNVEEFYEVYKGVVTEYHDMVT EMYSGPCVAMEIQQNNATKTFREFCGPADPEIARHLRPGTLRAIFGKTKIQNAVHCTDLPEDGLLEVQYFFKILD N

276/2825 FIGURE 251

 $\verb|CGAGGCCAAGTCCCGGGCGCTAGCCCACCTCCCACCGCCTCTTGGCTCCTCTCCTCTAGGCCGTCGCTTTCGG| \\$ GTTCTCTCATCGCTTCGTCGTTCGCCAATGTTTGAGGAGAAGGCCAGCAGTCCTTCAGGGAAG**ATC**GGAGGCGAG GGAGGTCGAGCTGAATCCTTGGCCTGAATATATTTACACACGTCTTGAGATGTATAATATACTAAAAGCA GAACATGATTCCATTCTGGCAGAAAAGGCAGAAAAAGATAGCAAGCCAATTAAAGTCACTTTGCCTGATGGTAAA CAGGTTGATGCGGAATCTTGGAAAACTACACCATATCAAATTGCCTGTGGAATTAGTCAAGGCCTGGCCGACAAC ACCGTTATTGCTAAAGTAAATAATGTTGTGTGGGACCTGGACCGCCCTCTGGAAGAAGATTGTACCTTGGAGCTT AGAGTCTATGGTGGATGTTTATGCTACGGTCCGCCAATAGAAAATGGATTCTATTATGACATGTACCTCGAAGAA GGGGGTGTGTCTAGCAATGATTTCTCTTCTCTGGAGGCTTTGTGTAAGAAAATCATTAAAGAAAAACAAGCTTTT GAAAGACTGGAAGTTAAGAAAGAAACTTTACTGGCAATGTTTAAGTACAACAAGTTCAAATGCCGGATATTGAAT GAAAAGGTGAATACTCCAACTACCACAGTCTATAGATGTGGCCCTTTGATAGATCTCTGCCGGGGTCCTCATGTT AGACACGGGCAAAATTAAGGCTTTAAAAATACACAAAAATTCCTCCACGTACTGGGAAGGCAAAGCAGATATG GAGACTCTCCAGAGAATTTATGGCATTTCATTCCCAGATCCTAAAATGTTGAAAGGTGGGAGAAGTTCCAAGAG AGTTGCTTTTTTCTGCCAAAAGGAGTCTATATTTATAATGCACTTATTGAATTCATTAGGAGCGAATATAGGAAA AGAGGATTCCAGGAGGTAGTCACCCCAAACATCTTCAACAGCCGACTCTGGATGACCTCGGGCCACTGGCAGCAC TACAGCGAGAACATGTTCTCCTTTGAGGTGGAGAAGGAGCTGTTTGCCCTGAAACCCATGAACTGCCCAGGACAC TCCCTTATGTTTGATCATCGGCCAAGGTCCTGGCGAGAACTGCCTCTGCGGCTAGCTGATTTTGGGGGGTCTTCAT AGGAACGAGCTGTCTGGAGCACTCACAGGACTCACCCGGGTACGAAGATTCCAACAGGATGATGCTCACATATTC TTTTCTTTTAAACTAAACCTTTCTACTCGCCCGGAAAAATTCCTTGGAGATATCGAAGTATGGGATCAAGCTGAG AAACAACTTGAAAACAGTCTGAATGAATTTGGTGAAAAGTGGGAGTTAAACTCTGGAGATGGAGCTTTCTATGGC CCAAAGATTGACATACAGATTAAAGATGCGATTGGGCGGTACCACCAGTGTGCAACCATCCAGCTGGATTTCCAG TTGCCCATCAGATTTAATCTTACTTATGTAAGCCATGATGGTGAGGATAAGAAAAGGCCAGTGATTGTTCATCGA GCCATCTTGGGATCAGTGGAAAGAATGATTGCTATCCTCACAGAAAACTATGGGGGGCAAATTGGCCCCCTTTTGG CTGTCCCTCGCCAGGTAATGGTAGTTCCAGTGGGACCAACCTGTGATGAATATGCCCAAAACGTACGACAACAA TTCCACGATGCCAAATTCATGGCAGACATTGATCTGGATCCAGGCTGTACATTGAATAAAAAGATTCGAAATGCA CAGTTAGCACAGTATAACTTCATTTTAGTTGTTGGTGAAAAAGAGAAAATCACTGGCACTGTTAATATCCGCACA AGAGACAATAAGGTCCACGGGGAACGCACCATTTCTGAAACTATCGAGCGGCTACAGCAGCTCAAAGAGTTCCGC AGCAAACAGGCAGAAGAAGTTT**TAA**TGAAAAAATTACCCAGATTGGCTCCATGGAAAAGGAGGAACAGCGTTT CCGTAAAATTGACTTTGTACTCGAAAACGTCAATTTATATTGAACTTGGAGGAGGAGTTTGGCAAAGTCTGAAAT AGAGAGCCAATAAAATGATTTTACTCATTCAGTATCTGAGTACTGGAAGTGAAACATGAGGAATGCTTTAGTGTA ATGTGGGAGAACTTTTTTGTAAATTTAATGCAATTGAAAAAGTTTTCAAATTCAATTAAGATAACTAGAATTGGT TATGGTGTAACCCGAATTC

277/2825 FIGURE 252

MGGEEKPIGAGEEKQKEGGKKKNKEGSGDGGRAELNPWPEYIYTRLEMYNILKAEHDSILAEKAEKDSKPIKVTL
PDGKQVDAESWKTTPYQIACGISQGLADNTVIAKVNNVVWDLDRPLEEDCTLELLKFEDEEAQAVYWHSSAHIMG
EGMERVYGGCLCYGPPIENGFYYDMYLEEGGVSSNDFSSLEALCKKIIKEKQAFERLEVKKETLLAMFKYNKFKC
RILNEKVNTPTTTVYRCGPLIDLCRGPHVRHTGKIKALKIHKNSSTYWEGKADMETLQRIYGISFPDPKMLKEWE
KFQEEAKNRDHRKIGRDQELYFFHELSPGSCFFLPKGVYIYNALIEFIRSEYRKRGFQEVVTPNIFNSRLWMTSG
HWQHYSENMFSFEVEKELFALKPMNCPGHSLMFDHRPRSWRELPLRLADFGGLHRNELSGALTGLTRVRRFQQDD
AHIFCAMEQIEDEIKGCLDFLRTVYSVFGFSFKLNLSTRPEKFLGDIEVWDQAEKQLENSLNEFGEKWELNSGDG
AFYGPKIDIQIKDAIGRYHQCATIQLDFQLPIRFNLTYVSHDGEDKKRPVIVHRAILGSVERMIAILTENYGGKL
APFWLSPRQVMVVPVGPTCDEYAQNVRQQFHDAKFMADIDLDPGCTLNKKIRNAQLAQYNFILVVGEKEKITGTV
NIRTRDNKVHGERTISETIERLQQLKEFRSKQAEEEF

278/2825 FIGURE 253A

GAATTCGGGTGGAGTCCTGAAGGAGGGCCTGATGTCTTCATCATCTCAAATTCTTGTAAGCTCTGCGTCGGGTG AAACCAGACAAAGCCGCGAGCCCAGGGATGGGAGCACGCGGGGGACGGCCTGCCGGCGGGGACGACAGCATTGCG ${\tt CCTGGGTGCAGCAGTGTCTCGGGGAAGGGAAGATATTTTAAGGCGTGTCTGAGCAGACGGGGAGGCTTTTC}$ CAAACCCAGGCAGCTTCGTGGCGTGTGCGGTTTCGACCCGGTCACAAAGCTTCAGCATGTCATGTGAGGACGG TCGGGCCCTGAAAGGAACGCTCTCGGAATTGGCCGCGGAAACCGATCTGCCCGTTGTGTTTTGTGAAACAGAGAAA ${\tt GATAGGCGGCCATGGTCCAACCTTGAAGGCTTATCAGGAGGGCAGACTTCAAAAGCTACTAAAA} {\color{red} {\bf ATC}} {\tt AACGGCCC}$ TGAAGATCTTCCCAAGTCCTATGACTATGACCTTATCATCATTGGAGGTGGCTCAGGAGGTCTGGCAGCTGCTAA GGAGGCAGCCCAATATGGCAAGAAGGTGATGGTCCTGGACTTTGTCACTCCCACCCCTCTTGGAACTAGATGGGG TCTTGGAGGAACATGTGTGAATGTGGGTTGCATACCTAAAAAACTGATGCATCAAGCAGCTTTGTTAGGACAAGC CCTGCAAGACTCTCGAAATTATGGATGGAAAGTCGAGGAGACAGTTAAGCATGATTGGGACAGAATGATAGAAGC TGTACAGAATCACATTGGCTCTTTGAATTGGGGCTACCGAGTAGCTCTGCGGGAGAAAAAAGTCGTCTATGAGAA TGCTTATGGGCAATTTATTGGTCCTCACAGGATTAAGGCAACAAATAATAAAGGCAAAGAAAAATTTATTCAGC AGAGAGTTTTCTCATTGCCACTGGTGAAAGACCACGTTACTTGGGCATCCCTGGTGACAAAGAATACTGCATCAG $\tt GTGCGCTGGATTTCTTGCTGGTATTGGTTAGGCGTCACTGTTATGGTTAGGTCCATTCTTAGAGGATTTGA$ CCAGGACATGGCCAACAAAATTGGTGAACACATGGAAGAACATGGCATCAAGTTTATAAGACAGTTCGTACCAAT TAAAGTTGAACAAATTGAAGCAGGGACACCAGGCCGACTCAGAGTAGTAGCTCAGCCAATAGTGAGGAAAT CATTGAAGGAGAATATAATACGGTGATGCTGGCAATAGGAAGAGATGCTTGCACAAGAAAAATTGGCTTAGAAAC CGTAGGGGTGAAGATAAATGAAAAGACTGGAAAAATACCTGTCACAGATGAAGAACAGACCAATGTGCCTTACAT TCAGAGGCTCTATGCAGGTTCCACTGTCAAGTGTGACTATGAAAATGTTCCAACCACTGTATTTACTCCTTTGGA ATATGGTGCTTGTGGCCTTTCTGAGGAGAAAGCTGTGGAGAAGTTTGGGGAAGAAATATTGAGGTTTACCATAG TTACTTTTGGCCATTGGAATGGACGATTCCGTCAAGAGATAACAACAAATGTTATGCAAAAATAATCTGTAATAC TAAAGACAATGAACGTGTTGTGGGCTTTCACGTACTGGGTCCAAATGCTGGAGAAGTTACACAAGGCTTTGCAGC GATGCTGTTGCCAAGACTGCAAACCACTGGCTCGTTTCCGTGCCCAAATCCAAGGCGAAGTTTTCTAGAGGGGTTC TTGGGCTCTTGGCACCTGCGTGTCCTTACCACCGCCCAAGGCCCCCTTGGATCTCTTGGATAGGAGTTGG ATGCATCCATGAAGTCACCAGTCTCAAGCCCATGTGGTAGGCGGTGATGGAACAACTGTCAAATCAGTTTTAGCA GTGTTAATGATATTAGAGATGAAAAACGTTAGCAGTTGATTTTTGTCCAAAAGCAAGTCATGGCTAGAGTATCCA TGCAAGGTGTCTTGTTGCATGGAAGGGATAGTTTGGCTCCCTTGGAGGCTATGTAGGCTTGTCCCGGGAAAGAGA ACTGTCCTGCAGCTGAAATGGACTGTTCTTTACTGACCTGCTCAGCAGTTTCTTCTCTCATATATTCCCAAAACA TTTAGGAAGGGAAATGGCTACTTGGCCAGCCATTGCCTGGCATTTGGTAGTATAGTATGATTCTCACCATTATTT GTCATGGAGGCAGACATACACCAGAAATGGGGGAGAAACAGTACATATCTTTCTGTCTTTAGTTTATTGTGTGCT GGTCTAAGCAAGCTGAGATCATTTGCAATGGAAAACACGTAACTTGTTTAAAAGTTTTTCTGGTAGCTTTAGCTT ATGCTTATGATTTAGCTGTTTTGTGGTAATTGCTTTTTAAAGGAAGTTATTAATATCATAAGTTATTATTAATAT TGTGCCTTGTGGAATTTTTGCAGAAGTGTTTATGCTTTGTTAGCATTTCAACTTGCATTATTATAAAGAGGTATT AATGCCTCAGTTATGTGTTTGTCAATGTACTGGCTGAGGATTCTATCTCAGCTGTCTTTTCTAACTGTGTAGGTT GAGTTTTGAACACGTGCTTGTGGACATCAGCCTCCTGCCAGCAGTTCTTGAAGCTTCTTTTTCATTCCTGCTACT CTACCTGTATTTCTCAGTTGCAGCACTGAGTGGTCAAAATACATTTCTGGGCCACCTCAGGGAACCCATGCATCT GCCTGGCATTTAGGCAGCAGAGCCCCTGACCGTCCCCCACAGGCTCTGCCTCACGTCCTCATCTCATTTGGCTGT TAATTTGTTTTTTCTCCAAGTCCACCAGTCTCTGAAATTAGAACAGTAGGCGGTATGAGATAATCAGGCCTAAT

279/2825 FIGURE **253B**

280/2825 FIGURE 254

MNGPEDLPKSYDYDLIIIGGGSGGLAAAKEAAQYGKKVMVLDFVTPTPLGTRWGLGGTCVNVGCIPKKLMHQAAL LGQALQDSRNYGWKVEETVKHDWDRMIEAVQNHIGSLNWGYRVALREKKVVYENAYGQFIGPHRIKATNNKGKEK IYSAESFLIATGERPRYLGIPGDKEYCISSDDLFSLPYCPGKTLVVGASYVALECAGFLAGIGLGVTVMVRSILL RGFDQDMANKIGEHMEEHGIKFIRQFVPIKVEQIEAGTPGRLRVVAQSTNSEEIIEGEYNTVMLAIGRDACTRKI GLETVGVKINEKTGKIPVTDEEQTNVPYIYAIGDILEDKVELTPVAIQAGRLLAQRLYAGSTVKCDYENVPTTVF TPLEYGACGLSEEKAVEKFGEENIEVYHSYFWPLEWTIPSRDNNKCYAKIICNTKDNERVVGFHVLGPNAGEVTQ GFAAALKCGLTKKQLDSTIGIHPVCAEVFTTLSVTKRSGASILQAGC

FIGURE 255

 $\tt CGGCCACGAGGCGGAATCCCTTCTGCTCTCCCAGCGCAGCGCCGCCCGGCCCCTCCAGCTTCCCGGACC{\color{red} ATC} {\color{blue} ATC}$

GCCAACCTGGAGCGCACCTTCATCGCCATCAAGCCGGACGGCGTGCAGCGCGGCCTGGTGGGCGAGATCATCAAG
CGCTTCGAGCAGAAGGGATTCCGCCTCGTGGCCATGAAGTTCCTCCGGGCCTCTGAAGAACACCTGAAGCAGCAC
TACATTGACCTGAAAGACCGACCATTCTTCCCTGGGCTGGTGAAGTACATGAACTCAGGGCCGGTTGTGGCCATG
GTCTGGGAGGGGCTGAACGTGGTGAAGACAGGCCGAGTGATGCTTGGGGAGACCAATCCAGCAGATTCAAAGCCA
GGCACCATTCGTGGGGACTTCTGCATTCAGGTTGGCAGGAACATCATCATGGCAGTGATTCAGTAAAAAGTGCT
GAAAAAGAAATCAGCCTATGGTTTAAGCCTGAAGAACTGGTTGACTACAAGTCTTGTGCTCATGACTGGGTCTAT
GAATAAGAGGTGGACACAACAGCAGTCTCCTTCAGCACGGCGTGGTGTCCCTGGACACAGCTCTTCATTCCAT
TGACTTAGAGGCCAACAGGATTGATCATTCTTTTATAGAGCATATTTGCCAATAAAGCTTTTTGGAAGCCGG

282/2825 FIGURE 256

MANLERTFIAIKPDGVQRGLVGEIIKRFEQKGFRLVAMKFLRASEEHLKQHYIDLKDRPFFPGLVKYMNSGPVVA MVWEGLNVVKTGRVMLGETNPADSKPGTIRGDFCIQVGRNIIHGSDSVKSAEKEISLWFKPEELVDYKSCAHDWV YE

283/2825 FIGURE 257

GCCAAGATGCCCATCCTGGGGTTGGGTACCTGGAAGTCCCCTCCAGGGCAGGTGACTGAGGCCGTGAAGGTGGCC ATTGACGTCGGGTACCGCCACATCGACTGTGCCCATGTGTACCAGAATGAGAATGAGGTGGGGGTGGCCATTCAG GAGAAGCTCAGGGAGCAGGTGGTGAAGCGTGAGGAGCTCTTCATCGTCAGCAAGCTGTGGTGCACGTACCATGAG AAGGGCCTGGTGAAAGGAGCCTGCCAGAAGACACTCAGCGACCTGAAGCTGGACTACCTGGACCTCTACCTTATT CACTGGCCGACTGGCTTTAAGCCTGGGAAGGAATTTTTCCCATTGGATGAGTCGGGCAATGTGGTTCCCAGTGAC ACCAACATTCTGGACACGTGGGCCGCCATGGAAGAGCTGGTGGATGAAGGGCTGGTGAAAGCTATTGGCATCTCC GAGTGCCACCCATATCTCACTCAGGAGAAGTTAATCCAGTACTGCCAGTCCAAAGGCATCGTGGTGACCGCCTAC GCGATCGCAGCCAAGCACAATAAAACTACAGCCCAGGTCCTGATCCGGTTCCCCATGCAGAGGAACTTGGTGGTG ATCCCCAAGTCTGTGACACCAGAACGCATTGCTGAGAACTTTAAGGTCTTTGACTTTGAACTGAGCAGCCAGGAT ATGACCACCTTACTCAGCTACAACAGGAACTGGAGGGTCTGTGCCTTGTTGAGCTGTACCTCCCACAAGGATTAC $\verb|CCCTTCCATGAAGAGTTT$\underline{\textbf{TGA}} \\ | AGCTGTGGTTGCCTGCTCGTCCCCAAGTGACCTATACCTGTGTTTCTTGCCTCA \\ | CCCTTCCATGAAGAGTTT$\underline{\textbf{TGA}} \\ | CCCTTCCATGAAGAGTTT$\underline{\textbf{TGC}} \\ | CCCTTCCATGAAGAGTTT$\underline{\textbf{TGA}} \\ | CCCTTCCATGAAGAGTTT$\underline{\textbf{TGC}} \\ | CCCTTCCATGAAGAGTTT$\underline{\textbf{TGA}} \\ | CCCTTCCATGAAGAGTTT$\underline{\textbf{TGC}} \\ | CCCTTCATGAAGAGTTT$\underline{\textbf{TGC}} \\ | CCCTTCATGAAGAG$ TTTTTTTCCTTGCAAATGTAGTATGGCCTGTGTCACTCAGCAGTGGGACAGCCAACCTGTAGAGTGGCCAGCGAGG GCGTGTCTAGCTTGATGTTGGATCTCAAGAGCCCTGTCAGTAGAAGTCTCTTCCAGTTTGCCCTT CTTTCTACCCTGCTGGGGAAAGTACAACCTGAATACCCTTTTCTGACCAAAGAGAAAGCAAAATCTACCAGGTCAA $\verb|AATAGTGCCACTAACGGTTGAGTTTTGACTGCTTGGAACTGGAATCCTTTCAGCAAGACTTCTCTTTGCCTCAAA| \\$ TAAAAAGTGCTTTTGTG

284/2825 FIGURE 258

MASRLLLNNGAKMPILGLGTWKSPPGQVTEAVKVAIDVGYRHIDCAHVYQNENEVGVAIQEKLREQVVKREELFI VSKLWCTYHEKGLVKGACQKTLSDLKLDYLDLYLIHWPTGFKPGKEFFPLDESGNVVPSDTNILDTWAAMEELVD EGLVKAIGISNFNHLQVEMILNKPGLKYKPAVNQIECHPYLTQEKLIQYCQSKGIVVTAYSPLGSPDRPWAKPED PSLLEDPRIKAIAAKHNKTTAQVLIRFPMQRNLVVIPKSVTPERIAENFKVFDFELSSQDMTTLLSYNRNWRVCA LLSCTSHKDYPFHEEF

285/2825 FIGURE 259

GGCACCGCGGGACGGACTTGGCTGTTGGTCGGTGGGTTCCCGTGCGGCGGCCGACGAGGAGAGACACA GTTGGAGCAGCTCCGTGGGCTGACTGGGGCGAGGCCTCAGCAGCGCGAGCTTGAGTGCGGCCGAGCCTGCGGCGC **TG**TCGGAAGCGGGCGAGGAGCAGCCCATGGAGACGACGGCGCCCACCGAGAACGGACATGAGGCCGTCCCCGAAG CGAGTCGCGGCCGGGGCTGGACGGCGCCGCGGGGGGCTGGAGGCGCCCCGCGCCCCCGAGCGGGAATCA GAACGCCCGAGGGACCAGATCAACGCCAGCAAGAACGAGGAGGACGCGGGAAAAATGTTCGTTGGTGGCCTGA GCTGGGATACTAGCAAAAAAGATTTAAAAAGACTATTTTACTAAATTTGGAGAGGTCGTTGACTGTACAATAAAAA TGGATCCCAACACTGGACGGTCAAGAGGGTTTGGGTTTATCCTGTTCAAAGATGCAGCCAGTGTGGAGAAGGTCC TAGACCAGAAGGACCACAGCTGGATGGCCGTGTCATTGACCCTAAAAAGGCCCATGGCTATGAAGAAGGACCCGG TCAAGAAAATCTTCGTTGGGGGTCTGAATCCTGAAAGTCCCACTGAGGAAAAGATCAGGGAGTACTTTGGCGAGT TTGGGGAGATTGAGCCCATTGAATTGCCAATGGATCCAAAGTTGAACAAAAGACGAGGTTTTGTGTTTATCACCT TTAAAGAAGAAGCCCGTGAAGAAGGTTCTGGAGAAAAAGTTCCATACTGTCAGTGGAAGCAAGTGTGAGATCA AGGTGGCCCAGCCCAAAGAAGTCTATCAGCAGCAGCAGTATGGCTCTGGGGGCCGTGGAAACCGCAACCGAGGGA ACCGAGGCAGCGGAGGTGGAGGTGGAGGTCAGAGTCAGAGTTGGAATCAGGGCTACGGCAACTACTGGA ACCAGGGCTACGGCTACCAGCAGGGCTACGGGCCTATGGCGGCTACGACTACTCGCCCTATGGCTATTACG GCTACGGCCCCGGCTACGACTACAGTCAGGGTAGTACAAACTACGGCAAGAGCCAGCGACGTGGTGGCCATCAGA GAACACAATTATGTACCAAATTTAACTTGGCAAACTTTCTATTGCCTGTCCCATGTGCATCTTATTTAAAATTTC $\tt CCCCATGGAAATCACTCTCCTGTTGACTATTTCCAGAGCTCTAGGTGTTTAGGCAGCGTGTGGTGTCTGAGAGGC$ CTCTGCAGCCTGGACCTGTGGACCCTGGTTGTAAAGAGTAAATTGTATCTTAGGAAACCAGTGTCACCTTTTTTT CACCTTTTAATTTTATTTTTGCGTCATACATTTCCTGTAACGGAAGTGTTAATTTTACTGTACTTTTTGGTA CCCCTTTTGGGAATCTAATGTATTGTAAGGTATTTTACACGTGTCCTGATTTTGCCACAACCTGGATATTGAAGC

286/2825 FIGURE 260

MSEAGEEQPMETTGATENGHEAVPEASRGRGWTGAAAGLEARPPRPRAGIRTAPRDQINASKNEEDAGKMFVGGL SWDTSKKDLKDYFTKFGEVVDCTIKMDPNTGRSRGFGFILFKDAASVEKVLDQKEHRLDGRVIDPKKAMAMKKDP VKKIFVGGLNPESPTEEKIREYFGEFGEIEAIELPMDPKLNKRRGFVFITFKEEEPVKKVLEKKFHTVSGSKCEI KVAQPKEVYQQQQYGSGGRGNRNRGNRGSGGGGGGGGGQSQSWNQGYGNYWNQGYGYQQGYGPGYGGYDYSPYGYY GYGPGYDYSQGSTNYGKSQRRGGHQNNYKPY

287/2825 FIGURE 261

AACGAAGTAGAAACAAGTGCAACCAATGGTCAGCCCGACCAACAGGCCGCACCAAAAGCACCCTCAAAGAAGGAA AAAAAGAAAGCCCTGAAAAGACAGATGAATATCTCCTAGCAAGGTTCAAAGGCGATGGCGTAAAATATAAGGCC AAGCTGATTGGCATTGATGTGCCAGATGCAAGAGGGGGATAAAATGAGCCAAGACTCTATGATGAAACTAAAG GTGACAGACAACCGGGCATTTGGTTACGTGTGTGGAGGAGAAGGCCAGCATCAGTTTTTTACCATAAAAACCGGG CAACAGGCTGAACCATTAGTTGTTGATCTTAAAGACCTTTTTCAAGTTATCTATAATGTAAAGAAAAAGGAAGAA GAAAAGAAAAAGATAGAGGAAGCCAGCAAAGCAGTTGAGAATGGGAGTGAGGCCCTAAGGATTCTAGATGACCAA CCAACAGAAAGCAAAGATATCCTGTTAGTGGATCTAAACTCTGAAATCGACACCAATCAGAATTCTTTAAGAGAA AATGCCTTTTCTGCCAATCTCAACTTCTTTCCCACCCCTAATCCTGATCCTTTCCGTGACGATCCTTTCACACAG CCAGACCAATCGACACCTTCTTCGTTTGATTCTCTCAAATCTCCAGATCAGAAGAAAAGAGAATTCGAGTAGCTCG TCTACTCCGCTGAGTAATGGGCCCCTGAATGGTGATGTTGACTACTTTGGTCAGCAATTTGACCAGATCTCTAAC CAAAATGGGGTATCTGAAAGAGAACAGAACGGCTTCTCTGTCAAATCCTCCCGGAACCCTTTTGTGGGAAGCCCT $\verb|CCCAAAGGACTGTCCATACAGAATGGCGTAAAGCAGGACTTGGAAAGCTCTGTCCAGTCCTCACCACATGACTCC| \\$ ATAGCCATTATCCCACCTCCACAAAGTACCAAACCAGGAAGAGGCAGAAGGACTGCTAAGTCTTCAGCCAATGAC GCCCTGCAGCCCAACCCTCTGGATCTCTTCAAAACAAGTGCTCCTGCCCCAGTGGGGCCCCTGGTGGGTCTAGGT GGTGTAACTGTCACACTCCCTCAGGCAGGACCATGGAACACAGCATCTTTGGTCTTCAATCAGTCCCCTTCAATG GCTCCGGGAGCCATGATGGGTGGTCAACCTTCAGGTTTTAGTCAGCCCGTCATTTTTGGTACAAGTCCAGCTGTT TCAGGTTGGAACCAGCCTTCACCCTTTGCAGCCTCAACTCCCCCTCCAGTGCCTGTTGTCTGGGGCCCTTCTGCA TCTGTGGCACCCAATGCTTGGTCAACAACAAGCCCTTTGGGGAATCCTTTTCAGAGCAATATTTTTCCAGCTCCT CCTCCCAAGGACATCTCCAGTGATGCCTTCACTGCCTTAGACCCACTTGGGGATAAAGAGATCAAGGATGTGAAA GAAATGTTTAAGGATTTCCAACTGCGGCAGCCACCTGCTGTGCCCGCGGGAAGGGAGAGCAGACTTCTTCTGGG ACTTTGAGTGCCTTTGCCAGTTATTTCAACAGCAAGGTTGGCATTCCTCAGGAGAATGCAGACCATGATGACTTT GATGCTAATCAACTATTGAACAAGATCAATGAACCACCAAAGCCAGCTCCCAGACAAGTTTCCCTGCCAGTTACC AAATCTACTGACAATGCATTTGAGAACCCTTTCTTTAAAGATTCTTTTGGTTCATCACAAGCCTCTGTGGCTTCT AGACCATCCAGAGGAATAAAAAGGTTGGCCTTAGTAGTCAAAAACAAAGCTGATAGCCAGACACGTTCTGATTTC TGCCCTTGTTCCAGCTTTGACGTATTATCTGTTGCCTTATTTCTCATTGCCTCTTCTACTTGTAAAATGCTTTTC TGTAAATGAAGTACAGTAGTTTCCCTACTGAACCCTACCTCTTGTGTCCCTGGAACCTTCTAGAACACCTGCCTT CTACCCTCTGGTTGGGAGATGCAGCCACCACCTCCTTCATATCATACTGTTTTGAATAAATTTTCAAATCCTTA TTGTTCAGAGTTGTTTGGGGGGTTCTGTTTCAGAGCATAAAACCTAAAGGTTATAGTAGAACAAGGCACCTTCTTA AAAGAAATCTTGCTTCAGACCATCAGTTACAGAGAATTTCCTAAAGTAAAATTGAAGCAACTACAACTTCTCCTT CTCCCCTTTTTTTTCTGATTCTTTTTTCAGTCAGTTTTGCTCCTGGGTTCAAGTAGTATTACCACCCTTTCACAA

288/2825 FIGURE 262

 $\label{thm:comparison} MSNEVETSATNGQPDQQAAPKAPSKKEKKKGPEKTDEYLLARFKGDGVKYKAKLIGIDDVPDARGDKMSQDSMMK LKGMAARGRSQGQHKQRIWVNISLSGIKIIDEKTGVIEHEHPVNKISFIARDVTDNRAFGYVCGGEGQHQFFTIK TGQQAEPLVVDLKDLFQVIYNVKKKEEEKKKIEEASKAVENGSEALRILDDQTNKLKSGVDQMDLFGDMSTPPDL NSPTESKDILLVDLNSEIDTNQNSLRENPFLTNGITSCSLPRPTPQASFLPENAFSANLNFFPTPNPDPFRDDPF TQPDQSTPSSFDSLKSPDQKKENSSSSSTPLSNGPLNGDVDYFGQQFDQISNRTGKQEAQAGPWPFSSSQTQPAV RTQNGVSEREQNGFSVKSSPNFFVGSPPKGLSIQNGVKQDLESSVQSSPHDSIAIIPPPQSTKPGRGRRTAKSSA NDLLASDIFAPPVSEPSGQASPTGQPTALQPNPLDLFKTSAPAPVGPLVGLGGVTVTLPQAGPWNTASLVFNQSP SMAPGAMMGGQPSGFSQPVIFGTSPAVSGWNQPSPFAASTPPPVPVVWGPSASVAPNAWSTTSPLGNPFQSNIFP APAVSTQPPSMHSSLLVTPPQPPPRAGPPKDISSDAFTALDPLGDKEIKDVKEMFKDFQLRQPPAVPARKGEQTS SGTLSAFASYFNSKVGIPQENADHDDFDANQLLNKINEPPKPAPRQVSLPVTKSTDNAFENPFFKDSFGSSQASV ASSQPVSSEMYRDPFGNPFA$

289/2825 FIGURE 263

AGATATCTCCGGCGCCCCCCCATTTTGACTCCAGTGTCTCGTTTGCAGTCGGCGCTTTAGGGGAACTGTCTTC AGACGGTGCCCCATAG**ATG**GCCAGCTTTCCCCCGAGGGTCAACGAGAAAGAGATCGTGAGATTACGTACTATAGG TGAACTTTTAGCTCCTGCAGCTCCTTTTGACAAGAAATGTGGTCGTGAAAATTGGACTGTTGCTTTTGCTCCAGA TGGTTCATACTTTGCTTGGTCACAAGGACATCGCACAGTAAAGCTTGTTCCGTGGTCCCAGTGCCTTCAGAACTT TCTCTTGCATGGCACCAAGAATGTTACCAATTCAAGCAGTTTAAGATTGCCAAGACAAAATAGTGATGGTGGTCA GAAAAATAAGCCTCGTGAACATATTATAGACTGTGGAGATATAGTCTGGAGTCTTGCTTTTGGGTCATCAGTTCC AGAAAAACAGAGTCGCTGTGTAAATATAGAATGGCATCGCTTCAGATTTGGACAAGATCAGCTACTTCTTGCTAC AGGGTTGAACAATGGGCGTATCAAAATATGGGATGTATATACAGGAAAACTCCTCCTTAACTTGGTAGATCATAC TGAAGTGGTCAGAGATTTAACTTTTGCTCCAGATGGAAGCTTGATCCTGGTGTCAGCTTCAAGAGACAAAACTCT CAGAGTATGGGACCTGAAAGATGATGGAAACATGATGAAAGTATTGAGGGGGGCATCAGAATTGGGTGTACAGCTG TGCATTCTCCTGACTCTTCTATGCTGTGTTCAGTCGGAGCCAGTAAAGCAGTTTTCCTTTGGAATATGGATAA $A \texttt{TACACCATGATACGGAAACTAGAAGGACATCACCATGATGTGGTAGCTTGTGACTTTTCTCCTGATGGAGCATT$ ACTGGCTACTGCATCTTATGATACTCGAGTATATCTGGGGATCCACATAATGGAGACATTCTGATGGAATTTGG GCACCTGTTTCCCCCACCTACTCCAATATTTGCTGGAGGAGCAAATGACCGGTGGGTACGATCTGTATCTTTTAG CCATGATGGACTGCATGTTGCAAGCCTTGCTGATGATAAAATGGTGAGGTTCTGGAGAATTGATGAGGATTATCC AGTGCAAGTTGCACCTTTGAGCAATGGTCTTTGCTGTGCCTTCTCTACTGATGGCAGTGTTTTAGCTGCTGGGAC ACATGACGGAAGTGTGTATTTTTGGGCCACTCCACGGCAGGTCCCTAGCCTGCAACATTTATGTCGCATGTCAAT TATT**TAG**AAGATTCTGCCTTCCCTAGTAGTAGGGACTGACAGAATACACTTAACACAAACCTCAAGCTTTACTGA GAGCTTTTAAAATATTATTTATAGACAATAGAAGTATTTCTGAACATATCAAATATAAATTTTTTTAAAGATCTA ACTGTGAAAACATACATACCTGTACATATTTAGATATAAGCTGCTATATGTTGAATGGACCCTTTTGCTTTTCTG ATTTTTAGTTCTGACATGTATATTTGCTTCAGTAGAGCCACAATATGTATCTTTGCTGTAAAGTGCAAGGAAAT TTTAAATTCTGGGACACTGAGTTAGATGGTAAATACTGACTTACGAAAGTTGAATTGGGTGAGGCGGGCAAATCA AAAATTAGCCAGGCGTGGTGGTGCACACCTGTAGTCCTAGCTACTTGGGAGGCTGAGGCAGGAGAATTGCTTGAA $\tt CCCAGGAGGTGGAGGTTGCAGTAAGCCAAGATCACACCACTGCACTCCAACCTGGACAACAGAGCGAGACTCCAT$ CTCAAAAAAAAAAAAATTGTGTTGCCTCATACGAAATGTATTTGGTTTTGTTGGAGAGTGTCAGACTGATCTG GAAGTGAAACACAGTTTATGTACAGGGAAAAGGATTTTATTATCCTTAGGAATGTCATCCAAGACGTAGAGCTTG TTTTTTTACTCCCCCTCTAAACACTGCTGCTGCCTTAATTTTAGAAAGCAGCTTACTAGTTTACCCTTGTGGTAT AAAGTATTATAAATTGTTGTGAATTTGAAGAATCCGTCTACTGTATTATTGCTAAATATTTTGTTTATACTAAGG TGCCAAAGAAGCAATACAGCATATCTGCTTTTGCCTTCTGTTGTTTATCTTACCTGCAGATATTAAGAATGTATG

290/2825 FIGURE 264

MASFPPRVNEKEIVRLRTIGELLAPAAPFDKKCGRENWTVAFAPDGSYFAWSQGHRTVKLVPWSQCLQNFLLHGT KNVTNSSSLRLPRQNSDGGQKNKPREHIIDCGDIVWSLAFGSSVPEKQSRCVNIEWHRFRFGQDQLLLATGLNNG RIKIWDVYTGKLLLNLVDHTEVVRDLTFAPDGSLILVSASRDKTLRVWDLKDDGNMMKVLRGHQNWVYSCAFSPD SSMLCSVGASKAVFLWNMDKYTMIRKLEGHHHDVVACDFSPDGALLATASYDTRVYIWDPHNGDILMEFGHLFPP PTPIFAGGANDRWVRSVSFSHDGLHVASLADDKMVRFWRIDEDYPVQVAPLSNGLCCAFSTDGSVLAAGTHDGSV YFWATPRQVPSLQHLCRMSIRRVMPTQEVQELPIPSKLLEFLSYRI

291/2825 FIGURE 265

GCGCGAGGGAGCCGGAGCCCGAGCACTAGCAGCAGCCGGAGTCGGCGGAAAGCACCCGGGCGCAGCCGGA $\texttt{GCCGGTGCCGCAGCTGCG} \underline{\textbf{ATC}} \texttt{GCCGTGGCCGTGGGGAGACCGTCTAATGAAGAGCTTCGAAACTTGTCTTTGTCT}$ GGCCATGTGGGATTTGACAGCCTCCCTGACCAGCTGGTCAACAAGTCTACTTCTCAAGGATTCTGTTTCAACATC CCAGCTACTCACAATGAACCAGGTGTTCGGTTAAAAGCCAGAAGTTATGAGCTTCAGGAAAGCAATGTACGGCTG ACGAGGATCCATGCCTGCCTCTACTTTATTGCCCCTACTGGACATTCACTAAAGTCCCTGGATCTGGTCACCATG AAAAAGCTGGACAGTAAGGTGAACATCATTCCAATAATTGCAAAAGCTGACACCATTGCCAAGAATGAACTGCAC AAATTCAAGAGTAAGATCATGAGTGAACTGGTCAGCAATGGGGTCCAGATATATCAGTTTCCCACTGATGAAGAA ACGGTGGCAGAGATTAACGCAACAATGAGTGTCCATCTCCCATTTGCAGTGGTTGGCAGCACCGAAGAGGTGAAG ATTGGCAACAAGATGGCAAAGGCCAGGCAGTACCCCTGGGGTGTGGTGCAGGTTGAGAATGAAAATCATTGCGAT TTTGTGAAACTTCGAGAGATGCTGATCCGCGTGAACATGGAGGACTTGCGAGAGCAGACTCACACCCGCCACTAT GAATTGTACCGACGCTGTAAGCTTGAAGAGATGGGGTTCAAGGACACTGACCCTGACAGCAAACCCTTCAGTCTT TTTGTTATGAGAGTGAAGGAGAAGAAGCTGAACTTAAGGAGGCAGAGAAAGAGCTTCACGAGAAGTTTGACCTT CTAAAGCGGACACCAAGAAGAAAAGAAGAAAGTGGAAGACAAGAAGAAGGAGCTTGAGGAGGAGGTGAACAAC TTCCAGAAGAAGAAGCAGCGGCTCAGTTACTACAGTCCCAGGCCCAGCAATCTGGGGCCCAGCAAACCAAGAAA GACAAGGATAAGAAAATGCAAGCTTCACA**TAA**AGCCTGGCAAGCCAAGGATGTTCCCGCATTCACCTGCTTTTG ACACCAGTAACTATTATTAACTCGTTTTGCTGAATGTTGTTGGGTGGTAGAAAATGATAGAACAAGGGAATAACC GCGAATGCTCTGTGCAGCTGGACTCTGTTTCCGGAAAGTAAATGATTTGCTTTTTATGCCTGTTCTGAATGGCAG CACGAAGCAGGCCTGTTACTTGTATGTCGCTTTGGACAGAGGAAAGTGGGGTAAAATGCTACCTGTACGTCTGAC ATGAAAACTTCTCACCGCCTCAGCAGCTGAACTAAAAACCTGAATAGCCATGACAAGAGTTTTGCATTTTCTTGAT GATTCATCTCCATGAGTGCACAATCCCTGAACTCACTGTCTTTTCTCCACACTTGTCCTAAGCCAAGGTAGATTT GTACGTAGACAGACTGGTGAGCAAGCATTATATTTTATTTTTACCCTTGCATGACATTTTCATTTTAATCAATAA CATTATTTGGCCTGAGCTTGTGGGTCTGTTCAGACTGTCTCCTCTCATGGTTTGAAACTGCATCTGAATGCCTGC CTTCAATCCTGGCCAAGTTGGAGTAGACTGGTATGAGAAAACTATGATTAGTTCACATTTACTGGTGCATCCTTG ATCCTCTCACAGATAGAGGTCTTAAAGGTTGGATCATGTAACATTGCTTAGTAGAAGAATCTTCTTAAGGATG ATGGGCTTTCTACAGCCTGCTTACCACTAACAGTAAGGAATCTTTCATAAACACACCTCAGTTTGTTCCCAGTGG GCTTAGAGGGAGGACCTGATGACTGATTCCAGGATACTTGTACTTCTAATAACATTTTTCATGAATCATGAGAAA ATTTCCACAGATACTTCCCTTAGAAAATTTGCTATAAACTCTGTATCATTGGTAGCACAAATTTGAGCGAGGCCC TGTCAATTTTAAGGTGGAAATAGGAAGGACCACAACATGACCCGTAAGTCAAGAAGGTAGACATTTCATATCCAG TGTCTGGAATTTTCCTCACCTTGGCTAGCTCCACCTGCTCTTTGTCTAAGGCCCTTGCCTCATCAGGGATTAGAA $\tt CTGGCCCATATGCCAGAACCTGTACTAAATGCCTAATTTGTATGGAAGAGTGCATATTTAATCTCTTTTCTATACCATACACAT$ TGCTCCTTTCTGATGCTTATCCTTTCATCTGTGTGATTGTTTTTTCCCCTCTACTAACAAGATCCTCCCAGCTTT $\verb|CTCTCTACATGTAGAAAGGATAACATTTCTCATGAACCCACTGCCCCTCTGCATTTTCCTCACTGGTTAG|$

292/2825 FIGURE 266

MAVAVGRPSNEELRNLSLSGHVGFDSLPDQLVNKSTSQGFCFNILCVGETGIGKSTLMDTLFNTKFESDPATHNE PGVRLKARSYELQESNVRLKLTIVDTVGFGDQINKDDSYKPIVEYIDAQFEAYLQEELKIKRSLFNYHDTRIHAC LYFIAPTGHSLKSLDLVTMKKLDSKVNIIPIIAKADTIAKNELHKFKSKIMSELVSNGVQIYQFPTDEETVAEIN ATMSVHLPFAVVGSTEEVKIGNKMAKARQYPWGVVQVENENHCDFVKLREMLIRVNMEDLREQTHTRHYELYRRC KLEEMGFKDTDPDSKPFSLQETYEAKRNEFLGELQKKEEEMRQMFVMRVKEKEAELKEAEKELHEKFDLLKRTHQ EEKKKVEDKKKELEEEVNNFQKKKAAAQLLQSQAQQSGAQQTKKDKDKKNASFT

293/2825 FIGURE 267

TCCATAGAGAAGATCTGGGCCCGGGGAGATCCTGGACTCCCGCGGGAACCCCACAGTGGAGGTGGATCTCTATACT GCCAAAGGTCTTTTCCGGGCTGCAGTGCCCAGTGGAGCCTCTACGGGCATCTATGAGGCCCTGGAGCTGAGGGAT GGAGACAACAGCGTTACTTAGGCAAAGGTGTCCTGAAGGCAGTGGACCACATCAACTCCACCATCGCGCCAGCC CTCATCAGCTCAGGTCTCTCTGTGGTGGAGCAAGAGAAACTGGACAACCTGATGCTGGAGTTGGATGGGACTGAG AACAAATCCAAGTTTGGGGCCAATGCCATCCTGGGTGTGTCTCTGGCCGTGTGTAAGGCAGGGGCAGCTGAGCGG GTGATCAATGGTGGCTCTCATGCTGGCAACAAGCTGGCCATGCAGGAGTTCATGATCCTCCCAGTGGGAGCTGAG AGCTTTCGGGATGCCATGCGACTAGGTGCAGAGGTCTACCATACACTCAAGGGAGTCATCAAGGACAAATACGGC AAGGATGCCACCAATGTGGGGGGTGAAGGTGGCTTTGCCCCCAATATCCTGGAGAACAGTGAAGCCTTGGAGCTG GTGAAGGAAGCCATCGACAAGGCTGGCTACACGGAAAAGATCGTTATTGGCATGGTTGCTGCCTCAGAGTTT TATCGTGATGGCAAATATGACTTGGACTTCAAGTCTCCCACTGATCCTTCCCGATACATCACTGGGGACCAGCTG GGGGCACTCTACCAGGACTTTGTCAGGGACTATCCTGTGGTCTCCATTGAGGACCCATTTGACCAGGATGATTGG GCTGCCTGGTCCAAGTTCACAGCCAATGTAGGGATCCAGATTGTGGGTGATGACCTGACAGTGACCAAACCCAAAA CGTATTGAGCGGCAGTGGAAGAAAAGGCCTGCAACTGTCTGCTGCTCAAGGTCAACCAGATCGGCTCGGTCACT GAAGCCATCCAAGCGTGCAAGCTGGCCCAGGAGAATGGCTGGGGGGGTCATGGTGAGTCATCGCTCAGGAGAGACT GAGGACACATTCATTGCTGACCTGGTGGTGGGGCTGTGCACAGGCCAGATCAAGACTGGTGCCCGTGCCGTTCT GAACGTCTGGCTAAATACAACCAGCTCATGAGAATTGAGGAAGAGCTGGGGGATGAAGCTCGCTTTGCCGGACAT AACTTCCGTAATCCCAGTGTGCTG**TGA**TTCCTCTGCTTGCCTGGAGACGTGGAACCTCTGTCTCATCCTCCTGGA ACCTTGCTGTCCTGATCTGTGATAGTTCACCCCCTGAGATCCCCTGAGCCCCAGGGTGCCCAGAACTTCCCTGAT TGACCTGCTCCGCTGCTCCTTGGCTTACCTGACCTCTTGCTGTCTCTGCTCGCCCTCCTTTCTGTGCCCTACTCA ATTATAAAAGGGGGTCCGTGGAAGAATGATCAGCATCTGTGATGGGAGCGTCAGGGTTTGGTGTGCTGAGGTGTTA GAGAGGGACCATGTGTCACTTGTGCTCTTGTCCCACGTGTCTTCCACTTTGCATATGAGCCGTGAACTGT TTTATTTATTTTTTTTTTTCATTCATCCCATTAATCATTTCCCCATAACTCAATGGCCTAAAACTGGCCTGA CTTGGGGGAACGATGTGTCTGTATTTCATGTGGCTGTAGATCCCAAGATGACTGGGGTGGGAGGTCTTGCTAGAA TGGGAAGGGTCATAGAAAGGGCCTTGACATCAGTTCCTTTGTGTGTACTCACTGAAGCCTGCGTTGGTCCAGAGC GGAGGCTGTGTGCCTGGGGGAGTTTTCCTCTATACATCTCTCCCCAACCCTAGGTTCCCTGTTCTTCCTCCAGCT GCACCAGAGCAACCTCTCACTCCCCATGCCACGTTCCACAGTTGCCACCACCTCTGTGGCATTGAAATGAGCACC TCCATTAAAGTCTGAATCAGTGC

294/2825 FIGURE 268

MSIEKIWAREILDSRGNPTVEVDLYTAKGLFRAAVPSGASTGIYEALELRDGDKQRYLGKGVLKAVDHINSTIAP ALISSGLSVVEQEKLDNLMLELDGTENKSKFGANAILGVSLAVCKAGAAERELPLYRHIAQLAGNSDLILPVPAF NVINGGSHAGNKLAMQEFMILPVGAESFRDAMRLGAEVYHTLKGVIKDKYGKDATNVGDEGGFAPNILENSEALE LVKEAIDKAGYTEKIVIGMDVAASEFYRDGKYDLDFKSPTDPSRYITGDQLGALYQDFVRDYPVVSIEDPFDQDD WAAWSKFTANVGIQIVGDDLTVTNPKRIERAVEEKACNCLLLKVNQIGSVTEAIQACKLAQENGWGVMVSHRSGE TEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGDEARFAGHNFRNPSVL

295/2825 FIGURE 269

CAACACAGGGGCAGTCTCCAGGACCTCCACACCATTAACAAGATGAGCCTTGTGCTCCCTTGGGCTCTAGAGAGG
AAGCCCTCTGAGCCCTCAGCCCCTCTTTCCTCCCTCTCCTAAAGTAATTTGATCCTCAGGAATTTGTTCTGCCC
TCATCTGGCCCTGGCCAGCTCTGCATTTGACAAATGCCAGGAAGAGGAAACTGTTGAGAAAACGGAACTACTGGG
GAAAGGGAGGGCTCACTGAGAACCATCCCGGTAACCCGACCGCCGCTGGTCACCATTGAAACCACATTGTGCAAACC
TTCTCTCTCTGTCAACAGCGGCCAGCCTCCCAACTACGAGATGCTCAAGGAGGAGCAGGAAGTGGCTATGCTGGGG
GGGCCCCACAACCCTGCTCCCCCGACGTCCACCGTGATCCACATCCGCAGCGAGACCTCCGTGCCTGACCATGTC
GTCTGGTCCCTGTTCAACACCCTCTTCATGAACACCTGCTGCCTGGCCTTCATAGCATTCGCCTACTCCGTGAAG
TCTAGGGACAGGAAGATGGTTGGCGACGTGACCGGGGCCCAGGCCTATGCCTCCACCGCCAAGTGCCTGAACATC
TGGGCCCTGATTTTGGGCATCTTCATGACCATTCTGCTCGTCATCACCACGTTTTCCATCCTC
GCCCTGCCCCCAGAGGCCAGGAGCTCTGCCCTTGACCTGTATCCCACGTACTCTATCTTCCATTCCTC
GCCCTGCCCCCAGAGGCCAGGAGCTCTGCCCTTGACCTGTTTCCACCTTCCATTCCTCGCCCTGT
CCCCACAGCCGAGTCCTGCATCAGCCCTTTATCCTCACACGCTTTCAATAAAGTGTATATG
TTTCT

296/2825 FIGURE 270

 ${\tt MNHIVQTFSPVNSGQPPNYEMLKEEQEVAMLGGPHNPAPPTSTVIHIRSETSVPDHVVWSLFNTLFMNTCCLGFIAFAYSVKSRDRKMVGDVTGAQAYASTAKCLNIWALILGIFMTILLVIIPVLVVQAQR}$

297/2825 FIGURE 271

AGCACTCTCCAGCCTCTCACCGCAAAATTACACACCCCAGTACACCAGCAGAGGAAACTTATAACCTCGGGAGGC GGGTCCTTCCCCTCAGTGCGGTCACATACTTCCAGAAGAGCGGACCAGGGCTGCTGCCAGCACCTGCCACTCAGA TATTGCTGGCTGGTATCTTTGTGGTCCACATCGCTACTGTTATTATGCTATTTGTTAGCACCATTGCCAATGTCT GGTTGGTTTCCAATACGGTAGATGCATCAGTAGGTCTTTGGAAAAACTGTACCAACATTAGCTGCAGTGACAGCC TGTCATATGCCAGTGAAGATGCCCTCAAGACAGTGCAGGCCTTCATGATTCTCTCTATCATCTTCTGTGTCATTG CCCTCCTGGTCTTCGTGTTCCAGCTCTTCACCATGGAGAAGGGAAACCGGTTCTTCCTCTCAGGGGCCACCACAC TGGTGTGCTGGCTGTCCATTCTTGTGGGGGTGTCCATCTACACTAGTCATTATGCGAATCGTGATGGAACGCAGT ATCACCACGGCTATTCCTACATCCTGGGCTGGATCTGCTTCTGCTTCAGCTTCATCATCGGCGTTCTCTATCTGG TCCTGAGAAAGAAA**TAA**GGCCGGACGAGTTCATGGGGGATCTGGGGGGGTGGGGAGGAGGAGCCGTTGAATCTGGG ATCCCAAACCATTACTGAGGGGATTCTCTACTGCCAAGCCCCTGCCCTGGGGAGAAAGTAGTTGGCTAGTACTTT GATGCTCCCTTGATGGGGTCCAGAGAGCCTCCCTGCAGCCACCAGACTTGGCCTCCAGCTGTTCTTAGTGACACA CACTGTCTGGGGCCCCATCAGCTGCCACAACACCAGCCCCACTTCTGGGTCATGCACTGAGGTCCACAGACCTAC TGCACTGAGTTAAAATAGCGGTACAAGTTCTGGCAAGAGCAGATACTGTCTTTGTGCTGAATACGCTAAGCCTGG AAGCCATCCTGCCCTTCTGACCCAAAGCAAAACATCACATTCCAGTCTGAAGTGCCTACTGGGGGGCTTTGGCCT GTGAGCCATTGTCCCTCTTTGGAACAGATATTTAGCTCTGTGGAATTCAGTGACAAAATGGGAGGAGGAAAGAGA GTTTGTAAGGTCATGCTGGTGGGTTAGCTAAACCAAGAAGGAGACCTTTTCACAATGGAAAACCTGGGGGGATGGT CAGAGCCCAGTCGAGACCTCACACACGGCTGTCCCTCATGGAGACCTCATGCCATGGTCTTTGCTAGGCCTCTTG CTGAAAGCCAAGGCAGCTCTTCTGGAGTTTCTCTAAAGTCACTAGTGAACAATTCGGTGGTAAAAGTACCACACA AACTATGGGATCCAAGGGGCAGTCTTGCAACAGTGCCATGTTAGGGTTATGTTTTTAGGATTCCCCTCAATGCAG TCAGTGTTTCTTTTAAGTATACAACAGGAGAGAGATGGACATGGCTCATTGTAGCACAATCCTATTACTCTTCCT CTAACATTTTTGAGGAAGTTTTGTCTAATTATCAATATTGAGGATCAGGGCTCCTAGGCTCAGTGGTAGCTCTGG CTTAGACACCACCTGGAGTGATCACCTCTTGGGGACCCTGCCTATCCCACTTCACAGGTGAGGCATGGCAATTCT GGAAGCTGATTAAAACACACATAAACCAAAACCAAACAGGCCCTTGGGTGAAAGGTGCTATATAATTGTGAA GTATTAAGCCTACCGTATTTCAGCCATGATAAGAACAGAGTGCCTGCATTCCCAGGAAAATACGAAAATCCCATG AGATAAATAAAAATATAGGTGATGGGCAGATCTTTTCTTTAAAATAAAAAAGCAAAAACTCTTGTGGTACCTAGT CAGATGGTAGACGAGCTGTCTGCCGCAGGAGCACCTCTATACAGGACTTAGAAGTAGTATGTTATTCCTGGT TAAGCAGGCATTGCTTTGCCCTGGAGCAGCTATTTTAAGCCATCTCAGATTCTGTCTAAAGGGGGTTTTTTTGGGAA GACGTTTTCTTTATCGCCCTGAGAAGATCTACCCCAGGGAGAATCTGAGACATCTTGCCTACTTTTCTTTATTAG CTTTCTCCTCATCCATTTCTTTTATACCTTTTCCTTTTTGGGGAGTTGTTATGCCATGATTTTTTGGTATTTATGTA AAAGGATTATTACTAATTCTATTTCTCTATGTTTATTCTAGGTAAAGGAAATGTTGAGGGCAAGCCACCAAATTAC CTAGGCTGAGGTTAGAGAGATTGGCCAGCAAAAACTGTGGGAAGATGAACTTTGTCATTATGATTTCATTATCAC ATGATTATAGAAGGCTGTCTTAGTGCAAAAAACATACTTACATTTCAGACATATCCAAAGGGAATACTCACATTT TGTTAAGAAGTTGAACTATGACTGGAGTAAACCATGTATTCCCTTATCTTTTTCTTTTTTCTGTGACATTTATG TCTCATGTAATTTGCATTACTCTGGTGGATTGTTCTAGTACTGTATTGGGCTTCTTCGTTAATAGATTATTTCAT ATACTATAATTGTAAATATTTTGATACAAATGTTTATAACTCTAGGGATATAAAAACAGATTCTGATTCCCTTCA AAAAAAAAA

298/2825 FIGURE 272

MLVLLAGIFVVHIATVIMLFVSTIANVWLVSNTVDASVGLWKNCTNISCSDSLSYASEDALKTVQAFMILSIIFC VIALLVFVFQLFTMEKGNRFFLSGATTLVCWLCILVGVSIYTSHYANRDGTQYHHGYSYILGWICFCFSFIIGVL YLVLRKK

299/2825 FIGURE 273

 $\tt AGCCAAAAGAGGAACGGCCTCCCACGTCCACAGGGACCTGACTTCCACCTCTCTGCCCAGATTTGCTTAT$ GTCACTGTCGCCCCGGGACGGGGAGGTGGGGAGCTGAGGGCAAGTCGCGCCCCTGAAATCCCAGCCGCCTA GCGATTGGCTGCAAGGGTCTCGGCTTGGCCGCGGATTAATCACACCCGAGGGCTTGAAAGGTGGCTGGGAGCGCC GGACACCTCAGACGGACGGTGGCCAGGGATCAGGCAGCGGCTCAGGCGACCCTGAGTGTGCCCCCACCCCGCCAT $\underline{\mathbf{G}}$ GCCCGGCTGCTGCAGGCGTCCTGCCTGCTCCTGGCCGGCTTCGTCTCGCAGAGCCGGGGACAAGA GAAGTCGAAGATGGACTGCCATGGTGGCATAAGTGGCACCATTTACGAGTACGGAGCCCTCACCATTGATGGGGA GGAGTACATCCCCTTCAAGCAGTATGCTGGCAAATACGTCCTCTTTGTCAACGTGGCCAGCTACTGAGGCCTGAC GGGCCAGTACATTGAACTGAATGCACTACAGGAAGAGCTTGCACCATTCGGTCTGGTCATTCTGGGCTTTCCCTG AGGCTTTGTCCCTAATTTCCAGCTCTTTGAGAAAGGGGATGTCAATGGAGAGAAAGAGCAGAAATTCTACACTTT CCTAAAGAACTCCTGTCCTCCCACCTCGGAGCTCCTGGGTACATCTGACCGCCTCTTCTGGGGAACCCATGAAGGT TCACGACATCCGCTGGAACTTTGAGAAGTTCCTGGTGGGGCCAGATGGTATACCCATCATGCGCTGGCACCACCG ACCACACTATCTACCCATCACAGACCCCTTTCCTATCACTCAAGGCCCCAGCCTGGCACAAATGGATGCATACAG TTCTGTGTACTGCCAGGCATGTGGGTGTGGGTGCAATGTGGGTGTTTACACACATGCCTACAGGTATGCGTGATT GTGTGTGTGCATGGGTGTACAGCCACGTGTCTACCTATGTGTCTTTCTGGGAATGTGTACCATCTGTGTGCCT GCAGCTGTGTAGTGCTGGACAGTGACAACCCTTTCTCTCCAGTTCTCCACTCCAATGATAATAGTTCACTTATAC CTAAACCCAAAGGAAAACCAGCTCTAGGTCCAATTGTTCTGCTCTAACTGATACCTCAACCTTGGGGCCAGCAT $\verb|CTCCCACTGCCTCCAAATATTAGTAACTATGACTGACGTCCCCAGAAGTTTCTGGGTCTACCACACTCCCCAACC|$ TCCCTGAGATCAACCAAGGCAGATGTGACAGCAAGGGCCACGGACCCCATGGCAGGGGTGGCGTCTTCATGAGGG $\tt AGGGGCCCAAAGCCCTTGTGGGCGGACCTCCCCTGAGCCTGTCTGAGGGGCCCAGCCCTTAGTGCATTCAGGCTAA$ GGCCCTGGGCAGGGATGCCACCCTGCTCCTTCGGAGGACGTGCCCTCACCCCTCACTGGTCCACTGGCTTGAG

300/2825 FIGURE 274

 $\label{topic} {\tt MARLLQASCLLSLLLAGFVSQSRGQEKSKMDCHGGISGTIYEYGALTIDGEEYIPFKQYAGKYVLFVNVASYXGL$$ {\tt TGQYIELNALQEELAPFGLVILGFPCNQFGKQEPGENSEILPTLKYVRPGGGFVPNFQLFEKGDVNGEKEQKFYT$$ {\tt FLKNSCPPTSELLGTSDRLFWEPMKVHDIRWNFEKFLVGPDGIPIMRWHHRTTVSNVKMDILSYMRRQAALGVKRKK}$$ K$

301/2825 FIGURE 275

302/2825 FIGURE 276

 ${\tt MQLKPMEINPEMLNKVLSRLGVAGQWRFVDVLGLEEESLGSVPAPACALLLLFPLTAQHENFRKKQIEELKGQEV\\ SPKVYFMKQTIGNSCGTIGLIHAVANNQDKLGFEDGSVLKQFLSETEKMSPEDRAKCFEKNEAIQAAHDAVAQEG\\ QCRVDDKVNFHFILFNNVDGHLYELDGRMPFPVNHGASSEDTLLKDAAKVCREFTEREQGEVRFSAVALCKAA\\$

303/2825 FIGURE 277

GGCCGTCGGCGGAGGCGCCATTTTGTGTAGCCGCCGAACCTTGTTGGAGGTTCTGGGGCGCAGAACCGCTACTGC GGTTCAGACAAAAGAGTGAGTAGAACAGAGCGTAGTGGAAGATACGGTTCCATCATAGACAGGGATGACCGTGA TGATGACTACCGAGACTATGACAGTCCAGAGAGAGAGCGTGAAAGAAGGAACAGTGACCGATCCGAAGATGGCTA GCTGCGCGGCCTTCCCATCACCATCACAGAGAGCGATATTCGAGAAATGATGGAGTCCTTCGAAGGCCCTCAGCC TGCGGATGTGAGGCTGATGAAGAGGAAAACAGGTGTAAGCCGTGGTTTCGCCTTCGTGGAGTTTTATCACTTGCA AGATGCTACCAGCTGGATGGAAGCCAATCAGAAAAAGTTGGTGATTCAAGGAAAGCACATTGCAATGCATTATAG CAATCCCAGACCTAAGTTTGAAGATTGGCTTTGTAACAAGTGCTGCCTTAACAATTTCAGGAAAAGACTAAAATG CTTCCGATGTGGAGCAGACAAGTTTGACTCTGAACAGGAAGTGCCTCCTGGAACCACAGAGTCGGTTCAGTCTGT GGATTACTACTGTGATACGATCATTCTTCGGAACATAGCTCCGCACACTGTGGTGGATTCCATCATGACAGCACT GTCTCCTTACGCGTCTTTAGCTGTCAATAACATCCGCCTCATAAAAGACAAACAGACCCAGCAGAACAGAGGCTT CGCATTTGTGCAGCTGTCCTCTGCAATGGATGCTTCTCAGCTGCTTCAGATATTACAGAGTCTCCATCCTCTTT GAAAATTGATGGCAAAACTATTGGGGTTGATTTTGCAAAAAGTGCCAGAAAAGACTTGGTCCTCTCAGATGGTAA CCGCGTCAGCGCCTTCTCTGTAGCTAGTACGGCTATTGCTGCTGCTCAGTGGTCATCCACCCAGTCTCAAAGTGG TGAAGGAGGCAGTGTTGACTACAGTTATCTGCAACCAGGTCAAGATGGCTATGCCCAATATGCTCAGTATTCACA GGATTATCAGCAGTTTTATCAACAACAAGCTGGAGGATTGGAATCTGATGCATCATCTGCATCAGGCACAGCAGT GACCACCACCTCAGCGGCTGTAGTGTCCCAGAGTCCTCAGCTGTATAATCAAACCTCCAATCCACCTGGCTCTCC GACTGAGGAAGCACAGCCTAGCACTAGCACAAGTACACAGGCCCCAGCCGCTTCCCCTACTGGTGTAGTTCCTGG TACCAAATATGCAGTACCTGACACGTCCACTTACCAGTATGATCATCAGTATATTACTATGATCCGACAAC AGGGCTCTATTATGACCCCAACTCGCAATACTACTATAATTCCTTGACCCAGCAGTACCTTTACTGGGATGGGGA GAATAAGCAGAAAGAAAACTTTAAAAATAGCTTTCAGCCTGTCAATTCCTTGAGGGAAGAAGAAAGGAGAGAATC TGCTGCAGCAGACGCTGGCTTTGCTCTCTTTGAGAAGAAGGGAGCCTTAGCTGAAAGGCAGCAGCTCATCCCAGA ATTGGTGCGAAATGGAGATGAGGAGAATCCCCTCAAAAGGGGTCTGGTTGCTGCTTACAGTGGTGACAGTGACAA CTGCCGGCGCCAGTTCCCGAACAAAGATGCCCTAGTCAGGCACCCAGCAACTCTCAGACCTTCACAAGCAAAACAT CCGAGACCGAGCTGCAGAAAGACGGGAGAAGTACGGCATTCCAGAACCTCCAGAGCCCAAGCGCAAGAAGCAGTT TGATGCCGGCACTGTGAATTACGAGCAACCCACCAAAGATGGCATTGACCACAGTAACATTGGCAACAAGATGCT GCAGGCCATGGGCTGGCGGAAGGCTCTGGCTTGGGACGAAAGTGTCAAGGCATTACGGCTCCCATTGAGGCTCA AGTTCGGCTAAAGGGAGCTGGCCTAGGAGCCAAAGGCAGCGCATATGGTTTGTCGGGCGCCGATTCCTACAAAGA GCACAAGAAGTGGTCCATCTCCCGAATTCGCTGTTACCGCCTGTCTCTTTAAGGGCATGCCTTGTGCTGTTAATA TGGTGAATGGCCTTCCTTCCCGCCAGAGGGCTTGTGAACAGACCGGAGAGGACAGTGGATTGTTTATACTCCAGT GTACATAGTGTAATGTAGCGTGTTTACATGTGTAGCCTATGTTGTGGTCCATCAGCCCCTCACATTCCTAGGGGT TTGAGATGCTGTAGGTGGTATGTGACACCAAAGCCACCTCTGTCATTTGTTGTGATGTCTTTTCTTGGCAAAAGC CTTGTGTATATTTGTATATTACACATTTGTACAGAATTTTGGAAGATTTTCAGTCTAGTTGCCAAATCTGGCTCC

304/2825 FIGURE 278

MGSDKRVSRTERSGRYGSIIDRDDRDERESRSRRRDSDYKRSSDDRRGDRYDDYRDYDSPERERERRNSDRSEDG YHSDGDYGEHDYRHDISDERESKTIMLRGLPITITESDIREMMESFEGPQPADVRLMKRKTGVSRGFAFVEFYHL QDATSWMEANQKKLVIQGKHIAMHYSNPRPKFEDWLCNKCCLNNFRKRLKCFRCGADKFDSEQEVPPGTTESVQS VDYYCDTIILRNIAPHTVVDSIMTALSPYASLAVNNIRLIKDKQTQQNRGFAFVQLSSAMDASQLLQILQSLHPP LKIDGKTIGVDFAKSARKDLVLSDGNRVSAFSVASTAIAAAQWSSTQSQSGEGGSVDYSYLQPGQDGYAQYAQYS QDYQQFYQQQAGGLESDASSASGTAVTTTSAAVVSQSPQLYNQTSNPPGSPTEEAQPSTSTSTQAPAASPTGVVP GTKYAVPDTSTYQYDESSGYYYDPTTGLYYDPNSQYYYNSLTQQYLYWDGEKETYVPAAESSSHQQSGLPPAKEG KEKKEKPKSKTAQQIAKDMERWAKSLNKQKENFKNSFQPVNSLREEERRESAAADAGFALFEKKGALAERQQLIP ELVRNGDEENPLKRGLVAAYSGDSDNEEELVERLESEEEKLADWKKMACLLCRRQFPNKDALVRHQQLSDLHKQN MDIYRRSRLSEQELEALELREREMKYRDRAAERREKYGIPEPPEPKRKKQFDAGTVNYEQPTKDGIDHSNIGNKM LQAMGWREGSGLGRKCQGITAPIEAQVRLKGAGLGAKGSAYGLSGADSYKDAVRKAMFARFTEME

305/2825 FIGURE 279

306/2825 FIGURE 280

 $\label{thm:constraint} {\tt MAVLSKEYGFVLLTGAASFIMVAHLAINVSKARKKYKVEYPIMYSTDPENGHIFNCIQRAHQNTLEVYPPFLFFL} \\ {\tt AVGGVYHPRIASGLGLAWIVGRVLYAYGYYTGEPSKRSRGALGSIALLGLVGTTVCSAFQHLGWVKSGLGSGPKC} \\ {\tt CH} \\ {\tt \cdot} \\$

307/2825 FIGURE 281A

TCGAAACGCCGCGTGACTTGTAGGTGAGAGAACGCCGAGCCGCCGCCGCCGCCGAGAAGCCCTTGT TCCCGCTGCTGGGAAGGAGTCTGTGCCGACAAGATGGCGGACGGGAGCTGAACGTGGACAGCCTCATCACCC GGCTGCTGGAGGTACGAGGATGTCGTCCAGGAAAGATTGTGCAGATGACTGAAGCAGAAGTTCGAGGCTTATGTA TCAAGTCTCGGGAGATCTTTCTCAGCCAGCCTATTCTTTTGGAATTTGGAAGCACCGCTGAAAATTTGTGGAGATA TTCATGGACAGTATACAGATTTACTGAGATTATTTGAATATGGAGGTTTCCCACCAGAAGCCAACTATCTTTTCT GCAAACGAAGATTTAATATTAAATTGTGGAAGACCTTCACTGATTGTTTTAACTGTCTGCCTATAGCAGCCATTG TGGATGAGAAGATCTTCTGTTGTCATGGAGGATTGTCACCAGACCTGCAATCTATGGAGCAGATTCGGAGAATTA TGAGACCTACTGATGTCCCTGATACAGGTTTGCTCTGTGATTTGCTATGGTCTGATCCAGATAAGGATGTGCAAG ATTTAGATTTGATTTGTCGAGCTCATCAGGTGGTGGAAGATGGATATGAATTTTTTGCTAAACGACAGTTGGTAA TGTGTTCATTTCAGATATTGAAACCATCTGAAAAGAAAGCTAAATACCAGTATGGTGGACTGAATTCTGGACGTC CTGTCACTCCACCTCGAACAGCTAATCCGCCGAAGAAAAGGTGAAGAAAAGGAATTCTGTAAAGAAACCATCAGAT TTGTTAAGGACATACTTCATAATATATAAGTGTGCACTGTAAAACCATCCAGCCATTTGACACCCTTTATGATGT CACACCTTTAACTTAAGGAGACGGGTAAAGGATCTTAAATTTTTTTCTAATAGAAAGATGTGCTACACTGTATTG TAATAAGTATACTCTGTTATAGTCAACAAAGTTAAATCCAAATTCAAAATTATCCATTAAAGTTACATCTTCATG TATCACAATTTTTAAAGTTGAAAAGCATCCCAGTTAAACTAGATGTGATAGTTAAACCAGATGAAAGCATGATGA CACTAGAATAATGGCAAATACTTCTAATTTTTTTCCCTAAACATTTTTAAAAGTGAAATATGGGAAGAGCTTTAC AGACATTCACCAACTATTATTTTCCCTTGTTTATCTACTTAGATATCTGTTTAATCTTACTAAGAAAACTTTCGC TTAATCATACAGTTTGACTGGGCAAACTTTACAGCTGATAGTGAATATTTTGCTTTATACAGGAATTGACACTGA TTTGGATTTGTGCACTCTAATTTTTAACTTATTGATGCTCTATTGTGCAGTAGCATTTCATTTAAGATAAGGCTC ATATAGTATTACCCAACTAGTTGGTAATGTGATTATGTGGTACCTTGGCTTTAGGTTTTCATTCGCACGGAACAC GTTGTATTTTTGAGTTGTTTGTTTTTTAGATCCACAGTACATGAGAATCCTTTTTTGACAAGCCTTGGAAAG AACTATGGGTATTGGGTGCTTAACTGTCTAATATTGCCATGTGAATGTTGTATACGATTGTAAGGCTTATGTCAC TAAAGATTTTTATTCTGATTTTTTCATAATCAAAGGTCATATGATACTGTATAGACAAGCTTTGTAGTGAAGTAT ATTAACAAATGGCAATGAGTAGAAAAGTTAACATGAAGATTTTAGAAGGAGAGACTTACAGGACACAGATTTGT GATTCTTTGACTGTGACACTATTGGATGTGATTCTAAAAGCTTTTATTGAGCATTGTCAAATTTGTAAGCTTCAT AGGGATGGACATCATATCTATAATGCCCTTCTATATGTGCTACCATAGATGTGACATTTTTTGACCTTAATATCGT GATATTTCATTTTCAGCACAGTGCAAAAGTTCTTTAAAATGCATATGTCTTTTTTTCTAATTCCGTTTTGTTTTA TCCTTACAGTGAGACATTTAAGCACACATTTTATTCACATAGATACTATGTCCTTGACATATTGAAATGATTCTT TTCTGAAAGTATTCATGATCTGCATATGATGTATTAGGTTAGGTCACAAAGGTTTTATCTGAGGTGATTTAAATA ACTTCCTGATTGGAGTGTAAGCTGAGCGATTTCTAATAAAATTTTAGTTGTACACTTTTAGTAGTCATAGTGA AGCAGGTCTAGAAAATAAGCCTTTGGCAGGGAAAAAGGGCAATGTTGATTAATCTCAGTATTAAACCACATTAAT CTGTATCCCATTGTCTGGCTTTTGTAAATTCATCCAGGTCAAGACTAAGTATGTTGGTTAATAGGAATCCTTTTT GGATGGAAATTTATCATGTTTAAAAATTATTCAAGCACTCTTAAAACCACTTAAAACAGCCTCCAGTCATAAAAAT

308/2825 FIGURE 281B

TTTAATCCAAATGTTATGACATTCAGAAATCATGAAACACAGTAGATATCTGTTATAATGTGGTGTATCACATGG $\tt ATTATAAAGCAAAGTTATGGTCGATTTCTATTCTTGAAAGAATCAACTACAGTGAATCCTTTGCATTTGAAGCCT$ TAACATGCATTGCTTTAATTTTGCCCAGGGACAAATTTTAATAATCAGCAAGACTGGTTTGTGCAAAGCGTTGAG TCATCAGGTATTTAGAGCCTAGCCAGCTACCCAGTATCCATGCTGCCATATCCCTTCATTGTAAAAAGTACCTAA ACATTCGTGAAATGATTTTTTTTAGCTGAAAAATGCTGGCAAGAAGAATTTTTAAAGCTTAAAATAGGTGGTAAAT TTGAAGTATGAGTGTTCACGAGAAACATAGGCTTTTCAAAAAAATTTTTATTCAAGGCAAAGCAAGGAACATC TTGAGATATGTCTCAAGAATATAAAGATGTATTATTTTAAGCCAAGGAGCTGAAATATATCTCAGTTTATAAATT AAAATGTGTTTAGATTAGGAATATGGTCGGGCTGAATTTGCTGTTGCTCCCTAACCAAATCCACCTCTTGTTTTC CTTGTGAGTCCATGGCTAAATCAAAGCTGCCCCTGAGAAGAGACTTAATCCAAGCCTGATTGTACTAGTGGCATC ACTTAGAAGTAGGCTTTCCCTCTTCCTAGTAGATCTCAATGTTTTATAATTCCTTAAAACAGCTGAAAATTGGGA CAACATACTTTACGCAATGAACAGTAGTTAAATAGGAAATAAACTAGTTCCATGTAAGTATACACCTAGAGTTTT AATTACCTTTATAATGTTTCTTAAAAGTGAAACTTAGATACAATTGTGATTGGATACTTAGATACTAAGTGAAAC CTGGTTAGGAAATTTTAAAAGTCAAAGCTTGTTTTCTTCAACCACTACCTTCTACATTGGTTGACTTAGACCGTA AGCTTTTTAAGTTTCTCATTGTAATTTACCTTCTCATGCAGATTGCTGATGTTTTTATTAAACCTTATTTTTACAA AAATGAAAAAA

309/2825 FIGURE 282

GLGLTRPCSRGPLLFIYLFSVGASECARALATRRGGGGGRAREKGELEPGSKRRVTCRRERRAVAAASAAEKPLF
PLLGRRVCADKMADGELNVDSLITRLLEVRGCRPGKIVQMTEAEVRGLCIKSREIFLSQPILLELEAPLKICGDI
HGQYTDLLRLFEYGGFPPEANYLFLGDYVDRGKQSLETICLLLAYKIKYPENFFLLRGNHECASINRIYGFYDEC
KRRFNIKLWKTFTDCFNCLPIAAIVDEKIFCCHGGLSPDLQSMEQIRRIMRPTDVPDTGLLCDLLWSDPDKDVQG
WGENDRGVSFTFGADVVSKFLNRHDLDLICRAHQVVEDGYEFFAKRQLVTLFSAPNYCGEFDNAGGMMSVDETLM
CSFQILKPSEKKAKYQYGGLNSGRPVTPPRTANPPKKR

310/2825 FIGURE 283

AGTTGCAGGCGAGCAGGCAGGAATCGCCGTGGCGTCTTGGTGTTCTCCACGCTGGTTCGCAGGTGAAGAGA**TG**G CGTTTGTGAAGAGTGGCTGGTTGCTGCGACAGAGTACTATTTTGAAGCGCTGGAAGAAGAACTGGTTTGATCTGT ACTGCATCAACATCCGCACGGGGCAGGAATGTCGGGATACTCAGCCCCCGGATGGAAAGTCAAAAGACTGCATGC TCCAGATTGTTTGTCGAGATGGGAAAACAATTAGTCTTTGTGCAGAAAGCACAGATGATTGCTTGGCCTGGAAAT $\verb|TTACACTCCAAGATTCTAGGACAAACACAGCGTATGTGGGCTCTGCAGTCATGACCGATGAGACATCCGTGGTTT| \\$ $\verb|CCTCACCTCCACCATACACGGCCTATGCTGCACCGGCCCCTGAGGCTTATGGCTATGGGCCATACGGTGGTGCGT| \\$ ACCCGCCAGGAACTCAAGTTGTCTACGCTGCGAATGGGCAGGCGTATGCCGTGCCCCACCAGTACCCATATGCAG GACTTTATGGACAGCCTGCTAACCAAGTCATCATTCGAGAGCGCTATCGAGACAACGACAGCGACCTGGCAC TGGGCATGCTGGCAGGAGCAGCCACGGGCATGGCCTTAGGGTCTCTATTTTGGGTCTTC**TAG**GGGCCTCAAGGTC TTGATGTGCATAGCTTCTGATAACCCTGTGTGCAATAATATGATTTGCAGGGCATTTCTGTTTGTGACAAAAGTT TTTAATAATAGTTTTAATCATTCCTTTGAAAGTAGTGATGTCATAATTGTACTAATCCACATAAGTACCACAGAG AAGGGTTTGAACTGTGCTATTTTGTTCAAATGTTGACTCTCCGGGGGCACTGGCTCATTCCAAGACTGTTCTTGT GCAACTCTCAGAATACCTTATTTGAGCATACCTGTTTTGAAAGGCATTTTCTTTTTAGAGTTAGGTGTAGTGCTT AAGGGTTAATTTATTTTCATGTTATGCCAGTAATATAGTGTTGTATGCCTATTGAGTGATTGTGGCAAGAAAAGC TACAGCTTCTTTGCGTTTAACTTTTTCAAACCACAGACCAGAACTGGTTGCATGTTACTTTAGGAGTTGTGGGTT GGTAAGCTCCCAGGTACTTCCCGAGGCTATGGTGTGAGAGCCCCCGTCCTGCCCTCTGGGGCTCCACAGGCCCCT GGCAAGGCCGATGGCTCAGGATGATGGGGCCACAGCCCGCCTTTGAACAATCATGCTTCAGAAATCTGCCTGACCC TAGCTGCTGCTGCTCACTTTATTCTTGTATGGCTTTGGTAGGCATACTTGGAGAACATATCCCACATTAGGA GCCTGTAATCCCAGCACTTTGAGAGACCGAGGCGGGCGGATCACGAGGTCAGGAGATCGAGACCATCCTGGCTAA CACGGTGAAACCCCATCTCTACTAAAAATACAAAAAATTAGCTGGGCGTGGTGGCAGGCGCCTGTGGTCCCAGCT ACTCGGGAGGCTGAGGCAGGAGAATAGTGTGAACCCAGGAGGCGGAGCTTGCAGTGAGCCAAGATAGTGCCACTG

311/2825 FIGURE 284

 $\label{thm:mafuksgwllrqstilkrwkknwfdlwsdghliyyddqtrqniedkvhmpmdcinirtgqecrdtqppdgkskdc \\ \texttt{MLQIVCRDGKTISLCAESTDDCLAWKFTLQDSRTNTAYVGSAVMTDETSVVSSPPPYTAYAAPAPEAYGYGPYGG} \\ \texttt{AYPPGTQVVYAANGQAYAVPHQYPYAGLYGQQPANQVIIRERYRDNDSDLALGMLAGAATGMALGSLFWVF} \\ \\ \texttt{MLQIVCRDGKTISLCAESTDDCLAWKFTLQDSRTNTAYVGSAVMTDETSVVSSPPPYTAYAAPAPEAYGYGPYGG} \\ \texttt{MLQIVCRDGKTISLCAESTDDCLAWKFTLQDSRTNTAYVGSAVMTDETSVVSSPPPYTAYAAPAPEAYGYGPYGG \\ \texttt{MLQIVCRDGKTISLCAESTDDCLAWKFTLQDSRTNTAYVGSAVMTDETSVVSSPPPYTAYAAPAPEAYGYGPYGG \\ \texttt{MLQIVCRDGKTISLCAESTDDCLAWKFTLQDSRTNTAYVGSAVMTDETSVVSSPPPYTAYAAPAPEAYGYGPYGG \\ \texttt{MYPPGTQVVYAANGQAYAVPHQYPYAGLYGQQPANQVIIRERYRDNDSDLALGMLAGAATGMALGSLFWVF \\ \texttt{MLQIVCRDGKTISLCAESTDDCLAWKFTLQDSRTNTAYVGSAVMTDETSVVSSPPPYTAYAAPAPEAYGYGPYGG \\ \texttt{MYPPGTQVVYAANGQAYAVPHQYPYAGLYGQQPANQVIIRERYRDNDSDLALGMLAGAATGMALGSLFWVF \\ \texttt{MUSUMMAGAATGMALGSLFWVF } \\ \texttt{MUSUMMAGAATGMAG$

312/2825 FIGURE 285

GGGAGAACCGTTCGCGGAGGAAAGGCGAACTAGTGTTGGGA**TC**GCCACCAACTGGGGGAGCCTCTTGCAGGATAA ACAGCAGCTAGAGGAGCTGGCACGGCAGGCCGTGGACCGGCCCTGGCTGAGGGAGTATTGCTGAGGACCTCACA GGAGCCCACTTCCTCGGAGGTGGTGAGCTATGCCCCATTCACGCTCTTCCCCTCACTGGTCCCCAGTGCCCTGCT GGAGCAAGCCTATGCTGTGCAGATGGACTTCAACCTGCTAGTGGATGCTGTCAGCCAGAACGCTGCCTTCCTGGA AGAGGGCATTGCCCAGACTGTTTCCTGGGCCTGAATCGCTCAGACTACATGTTCCAGCGCAGCGCAGATGGCTC CCCAGCCTGAAACAGATCGAAATCAACACCATCTCTGCCAGCTTTGGGGGGCCTGGCCTCCCGGACCCCAGCTGT GCACCGACATGTTCTCAGTGTCCTGAGTAAGACCAAAGAAGCTGGCAAGATCCTCTCTAATAATCCCAGCAAGGG ACTGGCCCTGGGAATTGCCAAAGCCTGGGAGCTCTACGGCTCACCCAATGCTCTGGTGCTACTGATTGCTCAAGA GAAGGAAAGAACATATTTGACCAGCGTGCCATAGAGAATGAGCTACTGGCCAGGAACATCCATGTGATCCGACG AACATTTGAAGATATCTCTGAAAAGGGGTCTCTGGACCAAGACCGAAGGCTGTTTGTGGATGGCCAGGAAATTGC TGTGGTTTACTTCCGGGATGGCTACATGCCTCGTCAGTACAGTCTACAGAATTGGGAAGCACGTCTACTGCTGGA CAGGCCGGGCATGCTGGAGATGTTGCTCCCTGGCCAGCCTGAGGCTGTGGCCCGCCTCCGCGCCACCTTTGCTGG CCTCTACTCACTGGATGTGGGTGAAGAAGGGGACCAGGCCATCGCCGAGGCCCTTGCTGCCCCTAGCCGGTTTGT GCTAAAGCCCCAGAGAGAGGGTGGAGGTAACAACCTATATGGGGAGGAAATGGTACAGGCCCTGAAACAGCTGAA GGACAGTGAGGAGAGGGCCTCCTACATCCTCATGGAGAAGATCGAACCTGAGCCTTTTGAGAATTGCCTGCTACG GACACTCGTGATGAACAAGCACGTGGGGCATCTACTTCGAACCAAAGCCATCGAGCATGCAGATGGTGGTGTGGC TATTTGTCATTCCTCCTAGCCCTCCTGAGGGGTATCCTCCTAAAGACCTCCAAAGTTTTTATGGAAGGGTAAA TACTGGTACCTTCCCCCAGCTTTCCATCTGAGGACCAGAAAAGTTGTGTCTCCCTTAGATGAGATCTAGACGCCC CCAAATCCTTGAGATGTGGGTATAGCTCAGGGTAAGCTGCTCTGAGGTAAAGGTCCATGAACCCTGCCCCACTCC TGTCAGCCCCTCATCAGCCTTTTCAGCAGGTTCCAGTGCCTGACTTGGGATAGGACTGAGTGGTAGGAGGAGGGG

313/2825 FIGURE 286

MATNWGSLLQDKQQLEELARQAVDRALAEGVLLRTSQEPTSSEVVSYAPFTLFPSLVPSALLEQAYAVQMDFNLL VDAVSQNAAFLEQTLSSTIKQDDFTARLFDIHKQVLKEGIAQTVFLGLNRSDYMFQRSADGSPALKQIEINTISA SFGGLASRTPAVHRHVLSVLSKTKEAGKILSNNPSKGLALGIAKAWELYGSPNALVLLIAQEKERNIFDQRAIEN ELLARNIHVIRRTFEDISEKGSLDQDRRLFVDGQEIAVVYFRDGYMPRQYSLQNWEARLLLERSHAAKCPDIATQ LAGTKKVQQELSRPGMLEMLLPGQPEAVARLRATFAGLYSLDVGEEGDQAIAEALAAPSRFVLKPQREGGGNNLY GEEMVQALKQLKDSEERASYILMEKIEPEPFENCLLRPGSPARVVQCISELGIFGVYVRQEKTLVMNKHVGHLLR TKAIEHADGGVAAGVAVLDNPYPV

314/2825 FIGURE 287

CGATCAGATCGATCTAAGATGCCGACTGTCGAACCGGAAACCACCCCTACTCCTAATCCCCCGACTACAGAAGAG GAGAAAACGGAATCTAATCAGGAGGTTGCTAACCCAGAACACTATATTAAACATCCCCTACAGAACAGATGGGCA GAAGACTTTTGGGCTCTGTACAACCATATCCAGTTGTCTAGTAATTTAATGCCTGGCTGTGACTACTCACTTTTT TACAGTGATGTTGTGGCGCTGTTGTTAATGTTAGAGCTAAAGGTGATAAGATAGCAATATGGACTACTGAA TGTGAAAACAGAGAGCTGTTACACATATAGGGAGGGTATACAAGGAAAGGTTAGGACTTCCTCCAAAGATAGTG ${\tt ATTGGTTATCAGTCCCACGCAGACACCAGCTACTAAGAGCGGCTCCACCACTAAAAATAGGTTTGTTGTT} \underline{{\tt TAA}}{\tt GAA}$ GACACCTTCTGAGTATTCTCATAGGAGACTGCGTCAAGCAATCGAGATTTGGGAGCTGAACCAAAGCCTCTTCAA AAAGCAGAGTGGACTGCATTTAAATTTGATTTCCATCTTAATGTTACTCAGATATAAGAGAAGTCTCATTCGCCT ATACAGATTTTACCTATCCACAATAGTCAGAAAACAACTTGGCATTTCTATACTTTACAGGAAAAAAATTCTGT TGTTCCATTTTATGCAGAAGCATATTTTGCTGGTTTGAAAGATTATGATGCATACAGTTTTCTAGCAATTTTCTT ACATTGGTGAAGGATCCAGGAATATGACACAAAGGTGGAATAAACATTAATTTTGTGCATTCTTTGGTAATTTTT TTTCCTAAACATAATTGTGGATTATAAAAAATGTAACATCATAATTACATTCCTAACTAGAATTAGTATGTCTGT TTTTGTATCTTTATGCTGTATTTTAACACTTTGTATTACTTAGGTTATTTTTGCTTTGGTTAAAAATGGCTCAAGT ACAACTAGATTTGTCCTTTTATTTCTCCATCTTTATAGAAGGAATTTGTACTTCTTATTGCAGGCAAGTCTCTAT ATTATGTCCTCTTTTGTGGTGTCTTCCATGTGAACAGCATAAGTTTGGAGCACTAGTTTGATTATTATGTTTATT ACAATTTTTAATAAATTGAATAGGTAGTATCATATATATGGA

315/2825 FIGURE 288

MATVEPETTPTPNPPTTEEEKTESNQEVANPEHYIKHPLQNRWALWFFKNDKSKTWQANLRLISKFDTVEDFWAL YNHIQLSSNLMPGCDYSLFKDGIEPMWEDEKNKRGGRWLITLNKQQRRSDLDRFWLETLLCLIGESFDDYSDDVC GAVVNVRAKGDKIAIWTTECENREAVTHIGRVYKERLGLPPKIVIGYQSHADTATKSGSTTKNRFVV

316/2825 FIGURE 289

GGCAGTTGGTAAGAACTAGATTGCATGTACAAAGACAGGTTTACTAAGTGCTGTACAGTGGTCCTGAGGTTACAG
TTGAATTAGAAAAACGAAATGTACTTACAGGAAATAAGAAAGCAAACCTTTCAAATGAGAGTGATGATTTCTTTA
AAAAAAATCAGTTTTTTTCTCTCAAATAATGTTCTTTATTTCACGAAATCGTCAATCTTAAGCATGAGCAGGGAT
AAACAACTCCTAGAAGGAACTCAATTCA

317/2825 FIGURE 290

GCGTAATTAAAAGGCGGCGGAAGAAGGTGGGAGGGTCATGACGCAGCGAGTTTCAGTCGTGACTTTTCTGGGGGC ATCGCGGCGTCCCCTTTTTTTTGCCTTTAAAGTAAAACGTCGCCCCGACGCACCCCCCGCGTATTTCGGGGGGGCG CGCCCTGCTCTGTATGCCGCTCTCTCCCGGCGCGCCGCCGCCGATCACAGCAGCAGCAGCACCGCCGCCGCG GTTGATGTGGTTGGGCCGGGGCTGAGGAGGCCGCCAAGATCCCGCAGTCCAAGTCCCGGAAGATCGCGATCCTGG GCTACCGGTCTGTGGGGAAATCCTCATTGACGATTCAATTTGTTGAAGGCCAATTTGTGGACTCCTACGATCCAA CCATAGAAAACACTTTTACAAAGTTGATCACAGTAAATGGACAAGAATATCATCTTCAACTTGTAGACACAGCCG GGCAAGATGAATATTCTATCTTTCCTCAGACATACTCCATAGATATTAATGGCTATATTCTTGTGTATTCTGTTA CATCAATCAAAAGTTTTGAAGTGATTAAAGTTATCCATGGCAAATTGTTGGATATGGTGGGGAAAGTACAAATAC CTATTATGTTGGTTGGGAATAAGAAAGACCTGCATATGGAAAGGGTGATCAGTTATGAAGAAGGGAAAGCTTTGG CAGAATCTTGGAATGCAGCTTTTTTTGGAATCTTCTGCTAAAGAAAATCAGACTGCTGTGGATGTTTTTCGAAGGA TAATTTTGGAGGCAGAAAAAATGGACGGGGCAGCTTCACAAGGCAAGTCTTCATGCTCGGTGATG**TGA**TTCTGCT GCAAAGCCTGAGGACACTGGGAATATATTCTACCTGAAGAAGCAAACTGCCCGTTCTCCTTGAAGATAAACTATG $\tt CTTCTTTTTCTTCTGTTAACCTGAAAGATATCATTTGGGTCAGAGCTCCCCTTCCGTTCAGATTATGTTAACTCT$ GAGTCTGTCCAAATGAGTTCACTTCCATTTTCAAATTTTAAGCAATCATATTTTCAATTTATATATTGTATTTCT TAATATTATGACCAAGAATTTTATCGGCATTAATTTTTCAGTGTAGTTTGTTGTTTAAAATAATGTAATCATCAA AATGATGCATATTGTTACACTACTATTAACTAGGCTTCAGTATATCAGTGTTTATTTCATTGTGTTAAATGTATA

318/2825 FIGURE 291

$$\label{thm:constraint} \begin{align} MPQSKSRKIAILGYRSVGKSSLTIQFVEGQFVDSYDPTIENTFTKLITVNGQEYHLQLVDTAGQDEYSIFPQTYS\\ IDINGYILVYSVTSIKSFEVIKVIHGKLLDMVGKVQIPIMLVGNKKDLHMERVISYEEGKALAESWNAAFLESSA\\ KENQTAVDVFRRIILEAEKMDGAASQGKSSCSVM\\ \end{align}$$

319/2825 FIGURE 292

CCCGGCAACCACGAGCCCAGCCAATCAGCGCCCCGGACTGCACCAGAGCCATGGTCGGCAGAAGAGCACTGATCG TACTGGCTCACTCAGAGAGGACCTCCTTCAACTATGCCATGAAGGAGGCTGCTGCAGCGGCTTTGAAGAAGAAAG GATGGGAGGTGGTGGACCTCTATGCCATGAACTTCAATCCCATCATTTCCAGAAAGGACATCACAGGTA AACTGAAGGACCCTGCGAACTTTCAGTATCCTGCCGAGTCTGTTCTGGCTTATAAAGAAGGCCATCTGAGCCCAG ATATTGTGGCTGAACAAAAGAAGCTGGAAGCCGCAGACCTTGTGATATTCCAGTTCCCCCTGCAGTGGTTTGGAG TCCCTGCCATTCTGAAAGGCTGGTTTGAGCGAGTGTTCATAGGAGAGTTTGCTTACACTTACGCTGCCATGTATG ACAAAGGACCCTTCCGGAGTAAGAAGGCAGTGCTTTCCATCACCACTGGTGGCAGTGGCTCCATGTACTCTCTGC AAGGGATCCACGGGGACATGAATGTCATTCTCTGGCCAATTCAGAGTGGCATTCTGCATTTCTGTGGCTTCCAAG TCTTAGAACCTCAACTGACATATAGCATTGGGCACACTCCAGCAGACGCCCGAATTCAAATCCTGGAAGGATGGA AGAAACGCCTGGAGAATATTTGGGATGAGACACCACTGTATTTTGCTCCAAGCAGCCTCTTTGACCTAAACTTCC AGGCAGGATTCTTAATGAAAAAAGAGGTACAGGATGAGGAGAAAAACAAGAAATTTGGCCTTTCTGTGGGCCATC ACTTGGGCAAGTCCAACTGACAACCAGATCAAAGCTAGAAAA TGA GAGATTCCTTAGCCTGGATTTCCTTCTAACATGTTATCAAATCTGGGTATCTTTCCAGGCTTCCCTGACTTGCTTTAGTTTTTAAGATTTGTGTTTTTCTTT TTCCACAAGGAATAAATGAGAGGGAATCGACCGTATTCGTGCATTTTTTGGATGCATTTTTAACTGATTCTTATGA TTACTATCATGGCATATAACCAAAATCCGACTGGGCTCAAGAGGCCACTTAGGGAAAGATGTAGAAAGATGCTAG AAAAATGTTCTTTAAAGGCATCTACACAATTTAATTCCTCTTTTTTAGGGTCAAAGTTTAGGGTACAGTTGGCTAG GTATCATTCAACTCTCCAATGTTCTATTAATCACCTCTCTGTAGTTTATGGTCAGAAGGGAATTGCTCAGAGAAG GTAAAAGACTGAATCTACCTGCCTAAGGGACTTAACTTGTTTGGTAGTTAGCCATCTAATGCTTGTTTATGATAT TTCTTGCTTTCAATTACAAAGCAGTTACTAATATGCCTAGCACAAGTACCACTCTTGGTCAGCTTTTGTTGTTTA ATTAAAAAAATTTTTTTTGAAGCAGTCTTGCTCTGTTACCCAGGCTGGAGTGCAGTGGTGTGATCTCGGCTCAC TGCAACCTCTGCCTCCCAGGTTCCAGCAATTCTCCTGCCTCAGCCTCCCTAGTAGCTGGGATGACAGGCGCCTGC CATCATGCCTGACTAATTTTTGTATTTTTAGTAGAGACGGCGTTTCACCATGTTGGCCAGGCTGGTCTCAAACTC $\tt CTGACCTCAGGTGATCCGCCTACCTCAGCCTCCCAAAGTGCTGGGATTACAGGCGTGATCCACCACACCTGGCCC$ TTGCAATCTTCTACTTTAAGGTTTGCAGAGATAAACCAATAAATCCACACCGTACATCTGCAATATGAATTCCAA GAAAGGAAATAGTACCTTCAATACTTAAAAATAGTCTTCCACAAAAAATACTTTATTTCTGATCTATACAAATTT TCAGAAGGTTATTTTCTTTATCATTGCTAAACTGATGACTTACCATGGGATGGGGTCCAGTCCCATGACCTTGGG GTACAATTGTAAACCTAGAGTTTTATCAACTTTGGTGAACAGTTTTGGCATAATAGTCAATTTCTACTTCTGGAA GTCATCTCATTCCACTGTTGGTATTATATAATTCAAGGAGAATATGATAAAACACTGCCCTCTTGTGGTGCATTG AAAGAAGAGATGAGAAATGATGAAAAAGGTTGCCTGAAAAATGGGAGACAGCCTCTTACTTGCCAAGAAAATGAAG GGATTGGACCGAGCTGGAAAACCTCCTTTACCAGATGCTGACTGGCACTGGTGGTTTTTGCTCTCGACATATCCA CAATAGCTGACGGCTGGGTGTTTCAGTTTGCAAAATATTTTGTTGCCTTCATCTTCACTGCAATTTTGTGTAAAT TTCTCAAAGATCTAATTAAATAAATAAAATTCATTTCTACAGACTCA

320/2825 FIGURE 293

MVGRRALIVLAHSERTSFNYAMKEAAAAALKKKGWEVVESDLYAMNFNPIISRKDITGKLKDPANFQYPAESVLA YKEGHLSPDIVAEQKKLEAADLVIFQFPLQWFGVPAILKGWFERVFIGEFAYTYAAMYDKGPFRSKKAVLSITTG GSGSMYSLQGIHGDMNVILWPIQSGILHFCGFQVLEPQLTYSIGHTPADARIQILEGWKKRLENIWDETPLYFAP SSLFDLNFQAGFLMKKEVQDEEKNKKFGLSVGHHLGKSIPTDNQIKARK

321/2825 FIGURE **294**

322/2825 FIGURE 295

 ${\tt MSGESARSLGKGSAPPGPVPEGSIRIYSMRFCPFAERTRLVLKAKGIRHEVININLKNKPEWFFKKNPFGLVPVLENSQGQLIYESAITCEYLDEAYPGKKLLPDDPYEKACQKMILELFSKVPSLVGSFIRSQNKEDYAGLKEEFRKEFTKLEEVLTNKKTTFFGGNSISMIDYLIWPWFERLEAMKLNECVDHTPKLKLWMAAMKEDPTVSALLTSEKDWQGFLELYLQNSPEACDYGL$

323/2825 FIGURE 296

CAAGGAGGACGCGGCGCGAGATTCGCCGCTTCAGCTTCTGCTGCAGCCCCGAGCCTGAGGCGGAAGCCGAGGC TGCGGCGGGTCCGGGACCCTGCGAGCGGCTGCTGAGCCGGGTGGCCGCCTGTTCCCCGCGCTGCGGCCTGCGG $\tt CTTCCAGGCGCACTACCGCGATGAGGACGGGGACTTGGTTGCCTTTTCCAGTGACGAGGAATTGACAATGGCCAT$ GTCCTACGTGAAGGATGACATCTTCCGAATCTACATTAAAGAGAAAAAAGAGTGCCGGCGGGACCACCGCCCACC GTGTGCTCAGGAGGCGCCCCGCAACATGGTGCACCCCAATGTGATCTGCGATGGCTGCAATGGGCCTGTGGTAGG AACCCGCTACAAGTGCAGCGTCTGCCCAGACTACGACTTGTGTAGCGTCTGCGAGGGAAAGGGCTTGCACCGGGG GCACACCAAGCTCGCATTCCCCAGCCCCTTCGGGCACCTGTCTGAGGGCTTCTCGCACAGCCGCTGGCTCCGGAA GGTGAAACACGGACACTTCGGGTGGCCAGGATGGGAAATGGGTCCACCAGGAAACTGGAGCCCACGTCCTCCTCG TGCAGGGGAGGCCCGCCCTGGCCCCACGGCAGATCAGCTTCTGGTCCATCGGAGGATCCGAGTGTGAATTTCCT GAAGAACGTTGGGGAGAGTGTGGCAGCTGCCCTTAGCCCTCTGGGCATTGAAGTTGATATCGATGTGGAGCACGG AGGGAAAAGAAGCCGCCTGACCCCCGTCTCTCCAGAGAGTTCCAGCACAGAGAGAAGAGCAGCTCACAGCCAAG CAGCTGCTCTCTGATCCCAGCAAGCCGGGTGGGAATGTTGAGGGCGCCACGCAGTCTCTGGCGGAGCAGATGAG AAAGATCGCCTTGGAGTCCGAGGGGCCCCTGAGGAACAGATGGAGTCGGATAACTGTTCAGGAGGAGATGATGA CTGGACCCATCTGTCTTCAAAAGAAGTGGACCCGTCTACAGGTGAACTCCAGTCCCTACAGATGCCAGAATCCGA GCCAGAGGCTGACCCGCGGCTGATTGAGTCCCTCTCCCAGATGCTGTCCATGGGCTTCTCTGATGAAGGCGGCTG GCTCACCAGGCTCCTGCAGACCAAGAACTATGACATCGGAGCGGCTCTGGACACCATCCAGTATTCAAAGCATCC CCCGCCGTTGTGACCACTTTTGCCCACCTCTTCTGCGTGCCCCTCTTCTGTCTCATAGTTGTGTTAAGCTTGCGT AGAATTGCAGGTCTCTGTACAGGCCAGTTTCTCTGCCTTCTTCCAGGATCAGGGGTTAGGGTGCAAGAAGCCATT TACGTTAGCAGCCCAGCACATAGCTTGCCTAATGGCTTTCACTTTCTCTTTTGTTTTAAATGACTCATAGGTCCC TGACATTTAGTTGATTATTTTCTGCTACAGACCTGGTACACTCTGATTTTAGATAAAGTAAGCCTAGGTGTTGTC AGCAGGCAGGCTGGGGAGGCCAGTGTTGTGGGCTTCCTGCTGGGACTGAGAAGGCTCACGAAGGGCATCCGCAAT GTTGGTTTCACTGAGAGCTGCCTCCTGGTCTCTCACCACTGTAGTTCTCTCATTTCCAAACCATCAGCTGCTTT TAAAATAAGATCTCTTTGTAGCCATCCTGTTAAATTTGTAAACAATCTAATTAAATGGCATCAGCACTTTAACCA ATGACGTTTGCATAGAGAGAAATGATTGACAGTAAGTTTATTGTTAATGGTTCTTACAGAGTATCTTTAAAAGTG CCTTAGGGGAACCCTGTCCCTCCTAACAAGTGTATCTCGATTAATAACCTGCCAGTCCCAGATCACACATCATCA TCGAAGTCTTCCCCAGTTATAAAGAGGTCACATAGTCGTGTGGGTCGAGGATTCTGTGCCTCCAGGACCAGGGGC CCACCCTCTGCCCAGGGAGTCCTTGCGTCCCATGAGGTCTTCCCGCAAGGCCTCTCAGACCCAGATGTGACGGGG TGTGTGGCCCGAGGAGCTGGACAGCGGCAGTGGGCCTGCTGAGGCCTTCTCTTGAGGCCTGTGCTCTGGGGGTC CCTTGCTTAGCCTGTGCTGGACCAGCTGGCCTGGGGTCCCTCTGAAGAGACCTTGGCTGCTCACTGTCCACATGT GAACTTTTCTAGGTGGCAGGACAAATCGCGCCCATTTAGAGGATGTGGCTGTAACCTGCTGGATGGGACTCCAT AGCTCCTTCCCAGGACCCCTCAGCTCCCGGCACTGCAGTCTGCAGAGTTCTCCTGGAGGCAGGGGGTGCTGCCT TGTTTCACCTTCCATGTCAGGCCAGCCTGTCCCTGAAAGAGAAGATGGCCATGCCCTCCATTTGTAAGAACAATG $\tt CCAGGGCCCAGGAGGACCGCCTGCCTGGCCTGGGCCTTGGCTGGGCCTCTGGTTCTGACACTTTCTGCTGGAAGC$ AAAAAAAAAAAAAAAAA

324/2825 FIGURE 297

MASLTVKAYLLGKEDAAREIRRFSFCCSPEPEAEAEAAAGPGPCERLLSRVAALFPALRPGGFQAHYRDEDGDLV AFSSDEELTMAMSYVKDDIFRIYIKEKKECRRDHRPPCAQEAPRNMVHPNVICDGCNGPVVGTRYKCSVCPDYDL CSVCEGKGLHRGHTKLAFPSPFGHLSEGFSHSRWLRKVKHGHFGWPGWEMGPPGNWSPRPPRAGEARPGPTAESA SGPSEDPSVNFLKNVGESVAAALSPLGIEVDIDVEHGGKRSRLTPVSPESSSTEEKSSSQPSSCCSDPSKPGGNV EGATQSLAEQMRKIALESEGRPEEQMESDNCSGGDDDWTHLSSKEVDPSTGELQSLQMPESEGPSSLDPSQEGPT GLKEAALYPHLPPEADPRLIESLSQMLSMGFSDEGGWLTRLLQTKNYDIGAALDTIQYSKHPPPL

325/2825 FIGURE 298

CCAGCAGGGAGCTGGGGGGAAACGACGCCAGGAAAGCTATCGCGCCAGAGAGGGCGACGGGGGCTCGGG $\verb|CCCTCCCAGACCGCCTGGGCCGCCGGATGTGCACTAAAATGGAACAGCCCTTCTACCACGACGACTCATACAC| \\$ AGCTACGGGATACGGCCGGGCCCCTGGTGGCCTCTCTCTACACGACTACAAACTCCTGAAACCGAGCCTGGCGGT CAACCTGGCCGACCCCTACCGGAGTCTCAAAGCGCCTGGGGCTCGCGGACCCGGCCCAGAGGGCGGCGGTGGCGG CAGCTACTTTTCTGGTCAGGGCTCGGACACCGGCGCGTCTCTCAAGCTCGCCTCTTCGGAGCTGGAACGCCTGAT TGTCCCCAACAGCAACGGCGTGATCACGACGCCTACACCCCCGGGACAGTACTTTTACCCCCGCGGGGGTGG ${\tt CAGCGGTGGAGGTGCAGGGGGCGCGCGTCACCGAGGAGCAGGAGGGCTTCGCCGACGGCTTTGTCAA}$ AGCCCTGGACGATCTGCACAAGATGAACCACGTGACACCCCCCAACGTGTCCCTGGGCGCTACCGGGGGGCCCCC GGCTGGGCCCGGGGGGCCTCTACGCCGGCCCGGAGCCACCTCCCGTTTACACCAACCTCAGCAGCTACTCCCCAGC CTCTGCGTCCTCGGGAGGCCCGGGGCTGCCGTCGGGACCGGAGGTCCTACCCGACGACCACCATCAGCTACCT CCCACACGCGCCGCCCTTCGCCGGTGGCCACCCGGCGCAGCTGGGCTTGGGCCGCGGCGCCTCCACCTTCAAGGA GGAACCGCAGACCGTGCCGGAGGCGCCAGCCGGGACGCCACGCCGCGGTGTCCCCCATCAACATGGAAGACCA AGAGCGCATCAAAGTGGAGCGCAAGCGGCTGCGGAACCGGCTGGCGGCCACCAAGTGCCGGAAGCGGAAGCTGGA GCGCATCGCGCCCTGGAGGACAAGGTGAAGACGCTCAAGGCCGAGAACGCGGGGCTGTCGAGTACCGCCGGCCT CCTCCGGGAGCAGGTGGCCCAGCTCAAACAGAAGGTCATGACCCACGTCAGCAACGGCTGTCAGCTGCTTGG GGTCAAGGGACACGCCTTC**TGA**ACGTCCCCTGCCCCTTTACGGACACCCCCTCGCTTGGACGGCTGGGCACACGC GGGCGATCGCGGCGGAGCTGGCCCCGCCGCCTGGTACTCAAGCCCGCGGGGACATTGGGAAGGGGACCCCCGCCC CCTGCCCTCCCCTCTCTGCACCGTACTGTGGAAAAGAACACGCACTTAGTCTCTAAAGAGTTTATTTTAAGACG

326/2825 FIGURE **299**

$$\label{thm:construction} \begin{align} MCTKMEQPFYHDDSYTATGYGRAPGGLSLHDYKLLKPSLAVNLADPYRSLKAPGARGPGPEGGGGGSYFSGQGSD \\ TGASLKLASSELERLIVPNSNGVITTTPTPPGQYFYPRGGGSGGGAGGAGGGVTEEQEGFADGFVKALDDLHKMN \\ HVTPPNVSLGATGGPPAGPGGVYAGPEPPPVYTNLSSYSPASASSGGAGAAVGTGSSYPTTTISYLPHAPPFAGG \\ HPAQLGLGRGASTFKEEPQTVPEARSRDATPPVSPINMEDQERIKVERKRLRNRLAATKCRKRKLERIARLEDKV \\ KTLKAENAGLSSTAGLLREQVAQLKQKVMTHVSNGCQLLLGVKGHAF$$

327/2825 FIGURE 300

CACTACCCGCTGGGCGAGCGCCGCAGCGACTACGACCGCGAGGCGCTGCTGGGCGTCCAGGAAGATGTGGATGAA TATGTTAAACTCGGCCACGAAGAGCAGCAAAAAAGACTGCAGGCGATCATAAAGAAAATCGACTTGGACTCAGAT GGCTTTCTCACTGAAAGTGAACTCAGTTCATGGATTCAGATGTCTTTTAAGCATTATGCTATGCAAGAAGCAAAA CAACAGTTTGTTGAATATGATAAAAACAGTGATGATACTGTGACTTGGGATGAATATAACATTCAGATGTATGAT CGTGTGATTGACTTTGATGAGAACACTGCTCTGGATGATGCAGAAGAGGGGTCCTTTAGGAAGCTTCACTTAAAG GACAAGAAGCGATTTGAAAAAGCTAACCAGGATTCAGGTCCCGGTTTGAGTCTTGAAGAATTTATTGCTTTTGAG CATCCTGAAGAAGTTGATTATATGACGGAATTTGTCATTCAAGAAGCTTTAGAAGAACATGACAAAAATGGTGAT GGATTTGTTAGTTTGGAAGAATTTCTTGGTGATTACAGGTGGGATCCAACTGCAAATGAAGATCCAGAATGGATA CTTGTTGAGAAAGACAGATTCGTGAATGATTATGACAAAGATAACGATGGCAGGCTTGATCCCCAAGAGCTGTTA CCTTGGGTAGTACCTAATAATCAGGGCATTGCACAAGAGGGGGGCGCTTCATCTAATTGATGAAATGGATTTGAAT GGTGACAAAAAGCTCTCTGAAGAAGAGATTCTGGAAAACCCGGACTTGTTTCTCACCAGTGAAGCCACAGATTAT GGCAGACAGCTCCATGATGACTATTTCTATCATGATGAGCTT**TAA**TCTCCGAGCCTGTCTCAGTAGAGTACTGGC TCCTTTTATAATTTGTTACCAGCTTTACTTTTGTGATAAAATATTGATGTTGTATTTTACACTCTTAAGTCTTAA CCACAGTCAGAATTATCTTAATGTAGAATTATAATTTTTGGCTCTTTTTAGGAAAAAACAAAATCTGATATTTTTCC AAACGTATTGAGCAACAAAATATTAATATTGTGCCATATGACAACAAAGTCTTTCCTAAATACTCCATCTGTTTA GTACTGTATTGTGGAATATTTGAGTTCTATTTCCAGACTTGAAAACATGGAGGATTTTAGAGATGCCTGAACAAT ATTATTTAAGTAGTATGTGACCGAGCTATAAATTTTTTTGTTTTTTGTTCTAAGTAGATTTAATTTGGGAACTGACA GGACAATGTTTTTAGGTTTAGCATTTTGTTTAAAAACCTTTAAAGAAACCTTTAGAAGGACTTAGACCTCACATA TTAATGTTGAGAAGTTCTGCTTAATTTTAAAATGGTTTCTATAAAGGGTTTTATTGTATGAAATAGAACTTTATA TTTTTGCATATGTATAGAGGATAATTATATTTAATGTATAACTATAGCATTATGGTGAGTGGAATTTGACATTGT CCAAACCTTTTCATTTTTGAGTGATTAAAAATGAAATGTCCTTTGTAAA

328/2825 FIGURE 301

 $\label{thm:constraint} $$\operatorname{MRLGPRTAALGLLLLCAAAAGAGKAEELHYPLGERRSDYDREALLGVQEDVDEYVKLGHEEQQKRLQAIIKKIDL$$ DSDGFLTESELSSWIQMSFKHYAMQEAKQQFVEYDKNSDDTVTWDEYNIQMYDRVIDFDENTALDDAEEESFRKL$$ HLKDKKRFEKANQDSGPGLSLEEFIAFEHPEEVDYMTEFVIQEALEEHDKNGDGFVSLEEFLGDYRWDPTANEDP$$ EWILVEKDRFVNDYDKDNDGRLDPQELLPWVVPNNQGIAQEEALHLIDEMDLNGDKKLSEEEILENPDLFLTSEA$$ TDYGRQLHDDYFYHDEL$$

329/2825 FIGURE 302

CCCGCGCCTGCAGCAAGGGCTCCGGCGACCCGTCCTCTTCCTCCTCCTCCGGGAACCCGCTCGTGTACCTGGACG TGGACGCCAACGGGAAGCCGCTCGGCCGCGTGGTGCTGGAGCTGAAGGCAGATGTCGTCCCAAAGACAGCTGAGA ACTTCAGAGCCCTGTGCACTGGTGAGAAGGGCTTCGGCTACAAAGGCTCCACCTTCCACAGGGTGATCCCTTCCT TCATGTGCCAGGCGGCGACTTCACCAACCACAATGGCACAGGCGGGAAGTCCATCTACGGAAGCCGCTTTCCTG ACGAGAACTTTACACTGAAGCACGTGGGGCCAGGTGTCCTGTCCATGGCTAATGCTGGTCCTAACACCAACGGCT CCCAGTTCTTCATCTGCACCATAAAGACAGACTGGTTGGATGGCAAGCATGTTGTTCTGGTCACGTCAAAGAGG GCATGGACGTCGTGAAGAAAATAGAATCTTTCGGCTCTAAGAGTGGGAGGACATCCAAGAAGATTGTCATCACAG GCCGCGTTGGGCTGTCAGCCAAGGTGCCTGAAACGATACGTGTGCCCACTCCACTGTCACAGTGTGCCTGAGGAA TTTCTGGGCATCTTTGTGGACATGATGTCACCCACCCTTGTCAAGCATTGCCTGTGATTGCCCAGCCCAGATTC ATCTGTGCCTTGGACATGGTGATGGTGATGGGTTGCCATCCAAGTGAAAGTCTTTTCCTTGACCAAGGGGGACAG AGAGCTTGGCTTTTGAAACACAACTCAGGGCTTTTGTGAAGGTTCCCCCGCTGAGATCTTTCCTCCTGGTTACTG TGAAGCCTGTTGGTTTGCTGCTGTCGTTTTTGAGGAGGGCCCATGGGGGGTAGGAGCAGTTGAACCTGGGAACAA $\tt CCTCACTTGAGCTGTGCCTAGACAATGTGAATTCCTGTGTTGCTAACAGAAGTGGCCTGTAAGCTCCTGTGCTCC$ GGAGGGAAGCATTTCCTGGTAGGCTTTGATTTTTCTGTGTGTTAAAGAAATTCAATCTACTCATGATGTGTTATG AAAAAAAAAAAAA

330/2825 FIGURE 303

 ${\tt MLALRCGSRWLGLLSVPRSVPLRLPAARACSKGSGDPSSSSSSGNPLVYLDVDANGKPLGRVVLELKADVVPKTA}\\ {\tt ENFRALCTGEKGFGYKGSTFHRVIPSFMCQAGDFTNHNGTGGKSIYGSRFPDENFTLKHVGPGVLSMANAGPNTN}\\ {\tt GSQFFICTIKTDWLDGKHVVFGHVKEGMDVVKKIESFGSKSGRTSKKIVITDCGQLS}\\$

331/2825 FIGURE 304

TGGCGCTGCGCTCCCGCTGGCTCGCCTCTCCGTCCCGCGCTCCGTGCCGCTGCCCCCGCGG TGGACGCCAACGGGAAGCCGCTCGGCCGCGTGGTGCTGGAGCTGAAGGCAGATGTCGTCCCAAAGACAGCTGAGA ACTTCAGAGCCCTGTGCACTGGTGAGAAGGGCTTCGGCTACAAAGGCTCCACCTTCCACAGGGTGATCCCTTCCT TCATGTGCCAGGCGGCGACTTCACCAACCACAATGGCACAGGCGGGAAGTCCATCTACGGAAGCCGCTTTCCTG ACGAGAACTTTACACTGAAGCACGTGGGGCCAGGTGTCCTGTCCATGGCTAATGCTGGTCCTAACACCAACGGCT GCATGGACGTCGTGAAGAAAATAGAATCTTTCGGCTCTAAGAGTGGGAGGACATCCAAGAAGATTGTCATCACAG ACTGTGGCCAGTTGAGC**TAA**TCTGTGGCCAGGGTGCTGGCATGGTGGCAGCTGCAAATGTCCATGCACCCAGGTG GCCGCGTTGGGCTGTCAGCCAAGGTGCCTGAAACGATACGTGTGCCCACTCCACTGTCACAGTGTGCCTGAGGAA TTTCTGGGCATCTTTGTGGACATGATGTCACCCACCCCTTGTCAAGCATTGCCTGTGATTGCCCAGCCCAGATTC ATCTGTGCCTTGGACATGGTGATGGTGATGGGTTGCCATCCAAGTGAAAGTCTTTTCCTTGACCAAGGGGGACAG CTAGAAGTGAAACTGCAACACTAACTTCCCCGTGCTGTGGTGACCTGAGTTGGTGACACAGGCCACAGACCCC AGAGCTTGGCTTTTGAAACACAACTCAGGGCTTTTGTGAAGGTTCCCCCGCTGAGATCTTTCCTCCTGGTTACTG TGAAGCCTGTTGGTTTGCTGCTGTCGTTTTTTGAGGAGGGCCCCATGGGGGTAGGAGCAGTTGAACCTGGGAACAAA $\verb|CCTCACTTGAGCTGTGCCTAGACAATGTGAATTCCTGTGTTGCTAACAGAAGTGGCCTGTAAGCTCCTGTGCTCC| \\$ GGAGGGAAGCATTTCCTGGTAGGCTTTGATTTTTCTGTGTGTTAAAGAAATTCAATCTACTCATGATGTGTTATG AAAAAAAAAAAAA

332/2825 FIGURE 305

 $\label{thm:cosrwlgllsvprsvplrlpaaracskgsgdpssssssgnplvyldvdangkplgrvvlelkadvvpkta \\ ENFRALCTGEKGFGYKGSTFHRVIPSFMCQAGDFTNHNGTGGKSIYGSRFPDENFTLKHVGPGVLSMANAGPNTN \\ GSQFFICTIKTDWLDGKHVVFGHVKEGMDVVKKIESFGSKSGRTSKKIVITDCGQLS$

333/2825 FIGURE 306

CCCGCAGCTCGTCCGCGCCATGTTCCAGGCGGCCGAGCGCCCCCAGGAGTGGGCCATGGAGGGCCCCCGCGACGG GCTGAAGAAGGAGCGGCTACTGGACGACCGCCACGACAGCGGCCTGGACTCCATGAAAGACGAGGAGTACGAGCA GATGGTCAAGGAGCTGCAGGAGATCCGCCTCGAGCCGCAGGAGGTGCCGCGGGCCTCGGAGCCCTGGAAGCAGCA GCTCACCGAGGACGGGGACTCGTTCCTGCACTTGGCCATCATCCATGAAGAAAAGGCACTGACCATGGAAGTGAT CCGCCAGGTGAAGGGAGACCTGGCTTTCCTCAACTTCCAGAACAACCTGCAGCAGACTCCACTCCACTTGGCTGT AAATACCCCCCTACACCTTGCCTGTGAGCAGGGCTGCCTGGCCAGCGTGGGAGTCCTGACTCAGTCCTGCACCAC CCCGCACCTCCACCCTGAAGGCTACCAACTACAATGGCCACACGTGTCTACACTTAGCCTCTATCCATGG CTACCTGGGCATCGTGGAGCTTTTGGTGTCCTTGGGTGCTGATGTCAATGCTCAGGAGCCCTGTAATGGCCGGAC TGCCCTTCACCTCGCAGTGGACCTGCAAAATCCTGACCTGGTGTCACTCCTGTTGAAGTGTGGGGCTGATGTCAA CAGAGTTACCTACCAGGGCTATTCTCCCTACCAGCTCACCTGGGGCCGCCCAAGCACCCGGATACAGCAGCAGCT GGGCCAGCTGACACTAGAAAACCTTCAGATGCTGCCAGAGAGTGAGGATGAGGAGAGCTATGACACAGAGTCAGA GTTCACGGAGTTCACAGAGGACGAGCTGCCCTATGATGACTGTGTGTTTTGGAGGCCAGCGTCTGACGTTA**TGA**GT GAAGAAAAATTTAAAGGGTGTACTTATATCCACACTGCACACTGCCTAGCCCAAAACGTCTTATTGTGGTAGGA TCAGCCCTCATTTTGTTGCTTTTGTGAACTTTTTGTAGGGGACGAGAAAGATCATTGAAATTCTGAGAAAACTTC TTTTAAACCTCACCTTTGTGGGGTTTTTGGAGAAGGTTATCAAAAATTTCATGGAAGGACCACATTTTATATTTA TTGTGCTTCGAGTGACCCCAGTGGTATCCTGTGACATGTAACAGCCAGGAGTGTTAAGCGTTCAGTGATGT GGGGTGAAAAGTTACTACCTGTCAAGGTTTGTGTTACCCTCCTGTAAATGGTGTACATAATGTATTGTTGGTAAT TATTTTGGTACTTTTATGATGTATATTTATTAAAGAGATTTTTTACAAATG

334/2825 FIGURE 307

MFQAAERPQEWAMEGPRDGLKKERLLDDRHDSGLDSMKDEEYEQMVKELQEIRLEPQEVPRGSEPWKQQLTEDGD SFLHLAIIHEEKALTMEVIRQVKGDLAFLNFQNNLQQTPLHLAVITNQPEIAEALLGAGCDPELRDFRGNTPLHL ACEQGCLASVGVLTQSCTTPHLHSILKATNYNGHTCLHLASIHGYLGIVELLVSLGADVNAQEPCNGRTALHLAV DLQNPDLVSLLLKCGADVNRVTYQGYSPYQLTWGRPSTRIQQQLGQLTLENLQMLPESEDEESYDTESEFTEFTE DELPYDDCVFGGQRLTL

335/2825 FIGURE 308

GTGTGCGGACGCAGTTGCGTGAGGGGTTTGTGCTATCCTCGGTGCTGTGCTGCAGAGCTAGTTCCTCTCCAGCTC AGCCGCGTAGGTTTGGACATATTTGACTCTTTTCCCCCCAGGTTGAATTGACCAAAGCA**ATG**GTGATGGAGAAGC CTAGTCCCCTGCTGGTCGGGCGGGAATTTGTGAGACAGTATTACACACTGCTGAACCAGGCCCCAGACATGCTGC ATAGATTTTATGGAAAGAACTCTTCTTATGTCCATGGGGGATTGGATTCAAATGGAAAGCCAGCAGATGCAGTCT ACGGACAGAAAGAATCCACAGGAAAGTGATGTCACAAAACTTCACCAACTGCCACACCAAGATTCGCCATGTTG ATGCTCATGCCACGCTAAATGATGGTGGTAGTCCAGGTGATGGGGCTTCTCTCTAACAACAACCAGGCTTTGA TCAGATACCAAGATGAGGTCTTTGGTGGGTTTGTCACTGAGCCTCAGGAGGAGTCTGAAGAAGAAGTAGAGGAAC CTGAAGAAGACAGCAAACACCTGAGGTGGTACCTGATGATTCTGGAACTTTCTATGATCAGGCAGTTGTCAGTA ATGACATGGAAGAACATTTAGAGGAGCCTGTTGCTGAACCAGAGCCTGATCCTGAACCAGAACCAGAACAAGAAC CTGTATCTGAAATCCAAGAGGAAAAGCCTGAGCCAGTATTAGAAGAAACTGCCCCTGAGGATGCTCAGAAGAGTT CTTCTCCAGCACCTGCAGACATAGCTCAGACAGTACAGGAAGACTTGAGGACATTTTCTTGGGCATCTGTGACCA GTAAGAATCTTCCACCCAGTGGAGCTGTTCCAGTTACTGGGATACCACCTCATGTTGTTAAAGTACCAGCTTCAC AGCCCGTCCAGAGTCTAAGCCTGAATCTCAGATTCCACCACAAAGACCTCAGCGGGATCAAAGAGTGCGAGAAC AACGAATAAATATTCCTCCCCAAAGGGGACCCAGACCAATCCGTGAGGCTGGTGAGCAAGGTGACATTGAACCCC GAAGAATGGTGAGACACCCTGACAGTCACCAACTCTTCATTGGCAACCTGCCTCATGAAGTGGACAAATCAGAGC TTAAAGATTTCTTTCAAAGTTATGGAAACGTGGTGGAGTTGCGCATTAACAGTGGTGGGAAATTACCCAATTTTG GTTTTGTTGTTTTGATGATTCTGAGCCTGTTCAGAAAGTCCTTAGCAACAGGCCCATCATGTTCAGAGGTGAGG $\tt TTGGAGTGGGAAGGGGGCTTGCGCCACGGCAG{\color{blue}{\textbf{TGA}}} ATCTTCATGGATCTTCATGCAGCCATACAAACCCTGGTTC$ ${\tt CAACAGAATGGTGAATTTTCGACAGCCTTTGGTATCTTGGAGTATGACCCCAGTCTGTTATAAACTGCTTAAGTT}$ TGTATAATTTTACTTTTTTTGTGTGTTAATGGTGTGTGCTCCCTCTCCCTCTCCCTTTCCCTGACCTTTAGTC ATATTACTGACATTTGGTATGTTTCATTCATTGGAATATTTCTTATTTTCTACGTGTTTGAAAAGCCTGTAAGAA ATACAGGATTTGATAATATTTTGAAGGCAGGAAAAACCCAAATTGTTTCTTCTTTGAGAGTCATGACTACCTTCT GGTGTGGAGAAATTGCCATTGGAAAATTTGACAATTTTGATTCTCACTGGTATGTTTAAAAACTGAATAAAAGGA ATAGAATTTTTTTTTGATAAAGGATCACAAAACAATTCTAAAAACCTAACTGTTTTTACCATTGAAATTTAAATTG $\tt TGATAATAGGTTTTAAATGTCTAGAATGCAACTGATAGGCTTTTCTTGAACTGTTAGTTTTTTTGAAGTAGTTTT$ TTCATGTTTAATTTGTATTTGTAAAAAAACAAAAAGCAAAAAATTCCCAAAACCCAGATAACAACCAGAGCAAA AGGTTCAGAGTATGTGGGGAATTATAGAATCCCTCTTTCATCACTTTGTGTATGTCTTTTGTTAACATATTTGTT ATGCCTTATTCTAAAATTGAGTCTCAAACTGGAATGCCTTTGAAGACAGATGCTTCTATAGAGGTTCTTTGACCT AAATAGTTCAGCATTTGTATTTTTATTCTGGTATCTAATCAGATTCCTAATCATAGCCCGTAAGAAGGAATGTTA TTTCTATTTTGTTATGGTTCTCTTTTATTGATGGGCATGCAGTGGGTGTTACTTGGAAATGGCCAATTTTTATTA

336/2825 FIGURE 309

MVMEKPSPLLVGREFVRQYYTLLNQAPDMLHRFYGKNSSYVHGGLDSNGKPADAVYGQKEIHRKVMSQNFTNCHT KIRHVDAHATLNDGVVVQVMGLLSNNNQALRRFMQTFVLAPEGSVANKFYVHNDIFRYQDEVFGGFVTEPQEESE EEVEEPEERQQTPEVVPDDSGTFYDQAVVSNDMEEHLEEPVAEPEPDPEPEPEQEPVSEIQEEKPEPVLEETAPE DAQKSSSPAPADIAQTVQEDLRTFSWASVTSKNLPPSGAVPVTGIPPHVVKVPASQPRPESKPESQIPPQRPQRD QRVREQRINIPPQRGPRPIREAGEQGDIEPRRMVRHPDSHQLFIGNLPHEVDKSELKDFFQSYGNVVELRINSGG KLPNFGFVVFDDSEPVQKVLSNRPIMFRGEVRLNVEEKKTRAAREGDRRDNRLRGPGGPRGGLGGGMRGPPRGGM VQKPGFGVGRGLAPRQ

337/2825 FIGURE 310

CCAAGATGCCGCCCCGTGGATCTAGAGCTGAAGAAGGCCTTCACAGAGCTTCAAGCCAAAGTTATTGACACTC AACAGAAGGTGAAGCTCGCAGACATACAGATTGAACAGCTAAACAGAACGAAAAAGCATGCACATCTTACAGATA AAGCAATTCACAGTCAGCTGTTAGAGAAGCAGAAAAATAGCAGAAAAAAATTAAAGAACTAGAACAGAAAAAGT CCTACCTGGAGCGAAGCGTTAAGGAAGCTGAGGACAACATCCGGGAGATGCTGATGGCACGAAGGGCCCAG**TAG**G GAGCCTCTCTGGGAAGCTCTTCCTCCTGCCCCTCCCATTCCTGGTGGGGGCAGAGGAGTGTCTGCAGGGAAACAG CTTCTCCTCTGCCCGATGGATGCTTTATTTGGATGGCCTGGCAACATCACATTTTCTGCATCACCCTGAGCCCC TGTGTGATGAACTCCCAGGAGAGGGAAGATGGGAGCCAGGGCAAGATAGGAAGCTCTGCCTGAGCTTTCCACTAG GCACGCCAGCCAGACCAATAAAAAGCGTCTGTCCCACTCTGCTAAGCCTGGTTTTCTTGAGCAGAGGGATGGAAC AGACAGAAGAGGAAGAAGAACAGATGTTCACAGCTGAATCTCAGTGAACAGAATAGCAGTCCCTGGATGGCAGT CTGCCTAAAGATTCCTTTCCCTGCCTTCTCCCATACATTCCAAAAGGAAGTTCAACAGTAAGCAGCACCTCCAAG ACTGTCTCCTTTTGGCCAATATCATAAGATGGACGCCATAATCCTGAGGCCTCCTAGAGGCTGAGGGGGCAACGG TGTGATCCAGCTGGCTCATCCCAGCCCAGGTGGGCCAATTATTCAATTTTCAAGAATTTTGTTGCAAGCCAGTTG CCCTAAAAAAAAAAAAAAAA

338/2825 FIGURE 311

 ${\tt MAAPVDLELKKAFTELQAKVIDTQQKVKLADIQIEQLNRTKKHAHLTDTEIMTLVDETNMYEGVGRMFILQSKEAIHSQLLEKQKIAEEKIKELEQKKSYLERSVKEAEDNIREMLMARRAQ$

339/2825 FIGURE 312

GAATTCGGGCGGGTTTGTACTATCCTCGGTGCTGTGGTGCAGAGCTAGTTCCTCTCCAGCTCAGCCGCGTAGGT $\tt TTGGACATATTTACTCTTTTCCCCCCAGGTTGAATTGACCAAAGCA{\bf ATG}{\it G}{\it TGATGGAGAAGCCTAGTCCCCTGCT}$ $\tt GGTCGGGCGGGAATTTGTGAGACAGTATTACACACTGCTGAACCAGGCCCCAGACATGCTGCATAGATTTTATGG$ AAAGAACTCTTCTTATGTCCATGGGGGATTGGATTCAAATGGAAAGCCAGCAGATGCAGTCTACGGACAGAAAGA AATCCACAGGAAAGTGATGTCACAAAACTTCACCAACTGCCACACCAAGATTCGCCATGTTGATGCTCATGCCAC GCTAAATGATGGTGTGGTAGTCCAGGTGATGGGGCTTCTCTCTAACAACAACAGCCTTTGAGGAGATTCATGCA GCAAACACCTGAGGTGGTACCTGATGATTCTGGAACTTTCTATGATCAGGCAGTTGTCAGTAATGACATGGAAGA ACATTTAGAGGAGCCTGTTGCTGAACCAGAGCCTGATCCTGAACCAGAACCAGAACAAGAACCTGTATCTGAAAT CCAAGAGGAAAAGCCTGAGCCAGTATTAGAAGAAACTGCCCCTGAGGATGCTCAGAAGAGTTCTTCTCCAGCACC TGCAGACATAGCTCAGACAGTACAGGAAGACTTGAGGACATTTTCTTGGGCATCTGTGACCAGTAAGAATCTTCC ACCCAGTGGAGCTGTTCCAGTTACTGGGATACCACCTCATGTTGTTAAAGTACCAGCTTCACAGCCCCGTCCAGA TCCTCCCAAAGGGGACCCAGACCAATCCGTGAGGCTGGTGAGCAAGGTGACATTGAACCCCGAAGAATGGTGAG ACACCCTGACAGTCACCAACTCTTCATTGGCAACCTGCCTCATGAAGTGGACAAATCAGAGCTTAAAGATTTCTT TCAAAGTTATGGAAACGTGGTGGAGTTGCGCATTAACAGTGGTGGGAAATTACCCAATTTTGGTTTTGTTGTTT TGATGATTCTGAGCCTGTTCAGAAAGTCCTTAGCAACAGGCCCATCATGTTCAGAGGTGAGGTCCGTCTGAATGT AGGTGGGCTGGTGGAATGAGAGGCCCTCCCCGTGGAGGCATGGTGCAGAAACCAGGATTTGGAGTGGGAAG GGGGCTTGCGCCACGGCAGTAATCTTCATGGATCTTCATGCAGCCATACAAACCCTGGTTCCAACAGAATGGTGA ATTTTCGACAGCCTTTGGTATCTTGGAGTATGACCCCAGTCTGTTATAAACTGCTTAAGTTTGTATAATTTTACT $\tt TTTTTGTGTGTTAATGGTGTGCTCCCTCTCCCTCTTCCCTTTCCTTAGTCTTTAGTCTTTCACTTCCAATT$ TTGTGGAATGATATTTTAGGAATAACGGACTTTTACCCGAATTC

340/2825 FIGURE 313

MVMEKPSPLLVGREFVRQYYTLLNQAPDMLHRFYGKNSSYVHGGLDSNGKPADAVYGQKEIHRKVMSQNFTNCHT KIRHVDAHATLNDGVVVQVMGLLSNNNQALRRFMQTFVLAPEGSVANKFYVHNDIFRYQDEVFGGFVTEPQEESE EEVEEPEERQQTPEVVPDDSGTFYDQAVVSNDMEEHLEEPVAEPEPDPEPEPEQEPVSEIQEEKPEPVLEETAPE DAQKSSSPAPADIAQTVQEDLRTFSWASVTSKNLPPSGAVPVTGIPPHVVKVPASQPRPESKPESQIPPQRPQRD QRVREQRINIPPQRGPRPIREAGEQGDIEPRRMVRHPDSHQLFIGNLPHEVDKSELKDFFQSYGNVVELRINSGG KLPNFGFVVFDDSEPVQKVLSNRPIMFRGEVRLNVEEKKTRAAREGDRRDNRLRGPGGPRGGLGGGMRGPPRGGM VQKPGFGVGRGLAPRQ

341/2825 FIGURE 314A

GCAGAGGACACTTGTC**ATG**CCGCCTCTAAACCTGTGGAGGCAGCGGTGGTCGCAGCCGCTGTACCGAGCTCCGG GAGTGGGGTGGCCGCCGGGACTGCGGGCCCGGGCACGGGGGGGCTGCCGCATGGCAGCTGGCTCTGGCGGT CGGGGCACCCCTGCTGCTGGGCGCGGGTGCCATATACCTGTGGAGTCGGCAGCAACGGCGCCGGGAGGCCAGAGG CCGGGGCGACGCCAGCGGCCTGAAGCGCAACAGCGAAGACCCCGGAGGGCAGGGCCAGTCCGGCCCCGGG CAGCGGACACCCTGAAGGTCCCGGTGCTCACTTGGACATGAACTCTCTTGATAGAGCCCAAGCAGCCAAGAATAA AGGCAATAAATATTTTAAAGCAGGAAAATATGAACAAGCTATTCAGTGCTATACTGAGGCTATTAGCTTGTGCCC TACAGAGAAGAATGTTGACCTTTCTACATTTTATCAAAACAGAGCTGCTGCCTTTGAACAGTTGCAAAAATGGAA AGAAGTGGCACAAGACTGTACAAAAGCTGTTGAACTTAATCCCAAATATGTGAAAGCTCTCTTTAGACGTGCAAA AGCCCATGAGAAGCTAGACAATAAGAAGGAATGTTTAGAAGATGTCACTGCTGTGTGTATATTAGAAGGGTTCCA AAATCAACAAAGCATGCTGTTAGCCGATAAAGTTCTTAAACTCCTTGGAAAAAGAGAAAAGCCAAAGAAAAATATAA GAATCGTGAACCTCTGATGCCATCTCCACAGTTTATCAAATCTTACTTCAGTTCTTTCACGGATGATATCATTTC TTCTGGATACTTAAAGGCCAAACAGTATATGGAAGAAGAAAACTACGATAAAATCATAAGTGAATGCTCAAAAGA AATAGATGCTGAAGGCAAATACATGGCAGAAGCATTGCTACTACGAGCTACCTTCTACCTGCTTATTGGCAATGC CAATGCAGCCAAACCAGATTTAGATAAAGTCATCAGTTTGAAAGAAGCTAATGTGAAGCTTCGAGCAAATGCTCT CATCAAAAGAGGCAGCATGTACATGCAACAGCAGCAGCCTTTGCTGTCCACTCAAGATTTTAACATGGCTGCTGA CATCGATCCTCAGAATGCAGATGTTTATCACCACCGAGGACAGCTGAAAATACTCCTTGATCAAGTTGAAGAAGC AGTGGCAGATTTTGATGAATGTATTAGGTTAAGACCTGAGTCTGCTCTGGCACAAGCACAGAAATGTTTTGCATT GTACCGCCAGGCATATACGGGAAACAACTCTTCACAAATCCAAGCAGCTATGAAAGGTTTTGAAGAGGTCATAAA GAAATTTCCAAGGTGTGCCGAAGGCTATGCACTATACGCCCAGGCATTAACAGATCAACAACAGTTTGGTAAAGC TGATGAAATGTATGATAAATGTATTGGATTTGGAACCAGATAATGCTACAACATATGTTCATAAAGGTTTACTTCA ACTTCAGTGGAAGCAAGATCTGGATAGAGGTTTGGAACTTATCAGCAAGGCTATTGAAATTGACAATAAATGTGA TTTTGCCTATGAAACCATGGGAACTATTGAAGTACAAAGAGGAAACATGGAGAAAGCCATTGACATGTTCAACAA AGCTATTAACCTGGCCAAATCGGAAATGGAGATGGCCCATCTGTATTCACTTTGCGATGCCGCCCATGCCCAGAC AGAAGTTGCAAAGAATACGGATTAAAACCACCAACATTA**TAA**AACAGGGGGGAAAGCAGACTGACCCTCTTTTTA AAAGTTTACCCCCTCTTCAACTGAACCCTAAAGACACTGTCATGAACTGTGTTGAATGGTGGAAATCAGTATTTC TATGTTCTGGATGATTCCGTCTATATATGTGTGAATAATGTAAGTATTTTACAGCATGTTGATTTTTAAATTAAC ATGGGGGATTAAAGTAAAATTGAGAGACCCTTTAAACCATTGTCAGCATGCACAATGCCTCTGATTCTGCAGTTT TAGAAACTTGGTGGCACTTATTAATCCTCTTGGCCCCTTTCCACTCTAATGGATAGTGTACATTCTTCTTAAAGT CCACAACAGCAGATTTTCTTGCAGTAAATTATGCAGATGCAAAATATTCTAATTGATATATGTGTTGGAAGACTG AGTATTGATGGGGGAGTGGACCAGACAAAGAGGTAAGATGAAACAGTAGTGTTTATAATTGTCTGTGACTATT TTCTATAATAATTAGTACTATTTAATGGTGAGCTTTTAAAAATGTAGGATAGAGGGTACAGTGGCACTGTATATA CTATTTATAGTCTCAGCTACTAGGGAGGCTGAGGCAAGAGGCTTGAGACCAGGAGCTCGAGGCTGTAATGTGCCA TGATGATTGCACCTGCGAATAGCCACTGCACTCCAGCCTGGGCAATATAGCAAGACCCCATCCTTTAAAAAATTT GGGAGTATTAAAATAGCTTAAAATTTCTCGTGAAGGACATGTGGCTAAAGGGTCAAAAAGGATGTAAGACTTGGA GCCAGAGCATAGTATTTCCTGAAATAACAAGTTTAGTGCTTTAACTATGGCTACATGTGCTTAAGGAATTTTGAG CCACTTATTTTTGAAGATGCTGAGGACATGTAGAGTGCTTTTTGTAGTGAGCTAACCTTGATCTCTAAGGACTAA TTTACGATTTATTCCATTTTCCACTTTTATAGACCATCCTTTTGCTTATATGCTAGATTTTTCTGGTGAGGGAA TTATGGTTTACACTGTTGGGAGTAAAGGAGCATTTTTACACCCCTTAAGGGTGCTTAATTCTGTTGAAACCAAAA AGATTTGTCTACAAATGCTATCTTTTTTAGAAACTATTAGAAATGACTCCCTTTCAAAGTCAATCTTTGGAAAAT

342/2825 FIGURE 314B

343/2825 FIGURE 315

MAASKPVEAAVVAAAVPSSGSGVGGGGTAGPGTGGLPRWQLALAVGAPLLLGAGAIYLWSRQQRRREARGRGDAS GLKRNSERKTPEGRASPAPGSGHPEGPGAHLDMNSLDRAQAAKNKGNKYFKAGKYEQAIQCYTEAISLCPTEKNV DLSTFYQNRAAAFEQLQKWKEVAQDCTKAVELNPKYVKALFRRAKAHEKLDNKKECLEDVTAVCILEGFQNQQSM LLADKVLKLLGKEKAKEKYKNREPLMPSPQFIKSYFSSFTDDIISQPMLKGEKSDEDKDKEGEALEVKENSGYLK AKQYMEEENYDKIISECSKEIDAEGKYMAEALLLRATFYLLIGNANAAKPDLDKVISLKEANVKLRANALIKRGS MYMQQQQPLLSTQDFNMAADIDPQNADVYHHRGQLKILLDQVEEAVADFDECIRLRPESALAQAQKCFALYRQAY TGNNSSQIQAAMKGFEEVIKKFPRCAEGYALYAQALTDQQQFGKADEMYDKCIDLEPDNATTYVHKGLLQLQWKQ DLDRGLELISKAIEIDNKCDFAYETMGTIEVQRGNMEKAIDMFNKAINLAKSEMEMAHLYSLCDAAHAQTEVAKK YGLKPPTL

344/2825 FIGURE 316

GGCGGAGGCGGGTTTCAGTGGCTTCTGGTGCTCTAGGGTGAGCTCTGCCCGGCTGCAGGGATCGCGGGGAGGGG
TAAGCTCATCGCAGTGATCGGAGACGAGGACACGGTGACTGGTTTCCTGCTGGGCGGCATAGGGGAGCTTAACAA
GAACCGCCATCCCAATTTCCTGGTGGTGGAGAAGGATACAACCATCAATGAGATCGAAGACACTTTCCGGCAATT
TCTAAACCGGGATGACATTGGCATCATCCTCATCAACCAGTACATCGCAGAGATGGTGCGGCATGCCCTGGACGC
CCACCAGCAGTCCATCCCCGCTGTCCTGGAGATCCCCTCCAAGGAGCACCCATATGACGCCGCCAAGGACTCCAT
CCTGCGCAGGGCCAGGGGCATGTTCACTGCCGAAGACCTGCGCTACGCCCTCATAGCCCTCAGCCCTTCCC
TCGTTTCCAGGCCTCTCCCCAGGCTTGCCATCAGCCTTCTTTACTTTTTGAGCCTCTGATTTCCAATTCCCTGCT
CCTTCCCACTCCATTAAGAGGCTAGGTGAGGCGCTTCTAGGTTGCTGGGGCTCTGCTTGATTAAAAGTCATAT
TCTTGCTTCTCCAG

345/2825 FIGURE 317

MAGRGKLIAVIGDEDTVTGFLLGGIGELNKNRHPNFLVVEKDTTINEIEDTFRQFLNRDDIGIILINQYIAEMVR HALDAHQQSIPAVLEIPSKEHPYDAAKDSILRRARGMFTAEDLR